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Consulting
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A Survey of Nova Scotia Hiking Trail Users

Prepared for:

Nova Scotia Department of
Economic Development and Tourism
Nova Scotia Sport and Recreation Commission
Human Resource Development Canada

Prepared by:

Gardner Pinfold Consulting Economists Limited

January, 1999

105-05618/

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Table of Contents

page

Executive Summary i

I. Introduction 1
   1. Research Objective 2

II. The Trails 3
   1. Trail Descriptions 3
   2. Trail Types 7

III. **Profile of Trail Users and Trail Use** 11
   1. Type of User 11
   2. Trail Use 16

IV. **Trail Conditions** 23
   1. Trail Condition Variables 23
   2. Other Improvements Recommended for Study Trails 25
   3. Factors Influencing Trail Use 31
   4. Other Improvements Recommended for Other Nova Scotia Trails 33
   5. Experience with Other Types of Trail Users 34
   6. Opinions on Multi-Use Trail Use 36
   7. Managing Trails to Accommodate All Types of Users 37

V. **Economic Impact** 41

VI. **Future Trail Development** 49
   1. Recommendations for Future Trail Development 49

Appendix A Background Information and Methodology Issues
Appendix B Questionnaire
Appendix C Estimating Total Trail Use
Appendix D Detailed Survey Results
Appendix E Interviewer Procedure Manual
Appendix F Customized Survey Manual
Appendix G Modified Trail Users Survey
Appendix H Survey Comments

Executive Summary

Objectives

Despite the attention currently being devoted to trail development by various levels of government and community groups, very little information on Nova Scotia trail users or the resulting economic impacts currently exists. The overall objective of this study, which was sponsored by the Nova Scotia Department of Economic Development and Tourism, the Nova Scotia Sport and Recreation Commission and Human Resource Development Canada, was to generate information that will guide trail development policies and funding decisions in Nova Scotia over the next few years. It was also geared to enable community development associations to form realistic expectations for the economic benefits of trail development. In particular, this study:

- Quantified trail usage for the study trails by user type (e.g., walkers, bicyclists);
- Profiled trail users and their expenditure patterns;
- Assessed the economic impact of trail user expenditure patterns for groups such as tourists and non-residents using survey data and the Nova Scotia Tourism Economic Impact Model; and,
- Identified the most cost-effective opportunities for trail development and trail enhancement initiatives.

Results

Between July 18, 1998 and October 12, 1998, 556 in-person interviews were conducted with trail users on 9 different trails in Nova Scotia. The study trails included: Dartmouth Urban Trail, Lunenburg Back Harbour Trail, Cape Split Trail, Blomidon Provincial Park Trail, Middlehead Trail, Bog Trail, Keji Seaside Adjunct Trail, Cape Chignecto Provincial Park Trail, and Tiverton Balancing Rock Trail. For the purposes of data analysis, these trails were divided into three different trail types that included tourist, urban, and hiking/walking trails.

The overall response rate of the surveys was 65%. However, the response rate varied for each trail and for the summer and fall seasons. The refusal rate was highest on the two urban trails and lowest on the four walking/hiking trails, and the fall refusal rate was lower than the summer refusal rate on most of the trails. The major findings of these surveys are summarized below.

Trail Users

Most of the trail users were walking or hiking, while a few were cycling (3%) or jogging (2%). Nova Scotia residents comprised 40% of the respondents, while the rest of the trail users interviewed were from other provinces (22%), the United States (29%), and other countries (9%). More than half of the respondents from other provinces came from Ontario, while more than a third of the U.S. trail users were from Massachusetts or New York states. The respondents from other countries resided in 14 other countries including 10 European countries.

More than half of the Nova Scotia respondents lived within a 30-minute drive of the study trails, but most of these were urban trail users. Trail users from Nova Scotia constituted 96% of the urban trail users, 58% of the hiking/walking trail users, and 15% of the tourist trail users.

More than 80% of the interviewees were between the ages of 25 and 64, while the highest percentage of respondents were between 45 and 54 years of age. Slightly more males than females were interviewed, while there were slightly more female members in the groups interviewed. Most of the respondents were highly educated and reported high household incomes, but urban trail users reported both lower education and income levels than other trail users.

When asked about their personal trail use, the most frequently chosen response was that respondents were comfortable using a trail for one to two hours. In fact, 79% of the trail users reported that they were comfortable using a trail for four hours or less, and only 6% of the respondents reported being comfortable on a backpacking trip.

Trail Use

The average number of times the respondents reported using a trail in Nova Scotia was 34, but more than 40% of the respondents had used a trail in Nova Scotia only once in the past 12 months. Respondents used an average of three different Nova Scotia trails in this time period, but again more than 40% of them used only one trail. Hiking/walking trail users used more trails than tourist trail users. The average time spent by trail users on the trails was 2 hours. The respondents used fewer trails on average outside of Nova Scotia. Frequent trail users reported that they used trails more in the summer and less in the winter.

The trail experiences sought most often by the respondents were mental/physical health benefits (39%), experiencing wilderness (16%), exploring new places (16%), nature appreciation/study (15%) and viewing wildlife (10%). Trail users reported seeking different kinds of experiences from the different types of trails.

Generally, the trails either had a substantial influence or they had very little influence on the respondents' travel plans. Nova Scotia residents were slightly more influenced by the province's hiking trail system than out-of-province trail users to take their trips in Nova Scotia to visit the study trails. Nova Scotian's choice of destination was also more highly influenced by the particular trail where they were interviewed than were non-Nova Scotians. Tourist trail users were also less influenced by particular trails than hiking/walking trail users.

The five most frequently cited sources of trail information on the study trails were word of mouth (30%), general knowledge (22%), road maps (19%), tourism information centres (14%), and brochures (12%). More than half of the respondents reported using additional sources of information for other trails in Nova Scotia. The most frequently cited sources of additional trail information included books (50%), tourism information centres (28%), brochures (28%), word of mouth (18%), and road maps (11%).

The most common activities undertaken by the respondents on the study trails on the day they were surveyed included walking/hiking (95%), photography (42%), wildlife viewing (39%), birdwatching (34%), and nature study (31%). When asked what other activities they generally participated in when using trails, the three most frequently cited activities were cycling (24%), cross-country skiing (20%), and photography (20%).

Trail Conditions

Overall, the majority of respondents reported that the trail conditions of the study trails should stay the same. The most frequently suggested recommendations for improvements included more interpretive information (37%), more direction and distance markers (34%), more drinking water (29%), more trail information brochures (24%), better identification of the trailhead on the road (24%), more washrooms (22%), and more garbage cans (20%). In general, fewer tourist trail users asked for trail improvements than other trail users. They recommended improvements in drinking water (26%), interpretive information (21%), direction and distance markers (19%), the identification of the trailhead on the road (16%), trail information brochures (15%), and washrooms (14%). Specific improvements recommended for each study trail are summarized in the report.

The factors which were reported to motivate trail users to increase their usage the most were more information on specific trails in guidebooks and brochures (68%), more signs on the road identifying the exact location of trails (60%), more day use trails (59%), more ocean views (57%), and more scenic viewing areas (53%). The three types of trail users reported being motivated differently by the nine suggested factors. In general, fewer tourist trail users reported that they would use trails more if these changes were implemented.

When asked to suggest other improvements for other Nova Scotia trails, trail users recommended improvements in signage, maintenance, trail facilities, trail information, interpretation, more trails, and promotion. Respondents also noted that there was a general lack of information on trails.

Respondents did not want to share trails with motorized vehicles, and had mixed views towards the use of bicycles on trails. Most trail users agreed that dogs should be kept on leashes. Signs were recommended to inform trail users about multi-use trail designations. Safety and trail erosion and damage were concerns raised by respondents about multi-use trails. Some respondents felt that multi-use designations of trails needed to be done on a trail-specific basis.

Trail Counts and Estimated Trail Usage

The average summer use on the study trails was considerably higher than the average fall trail use. Trail use in the spring was estimated according to seasonal patterns of Nova Scotia tourism and fall trail usage patterns. The total estimated trail usage for spring, summer and fall varied between 2,000 and 33,200 for the individual trails. The estimated trail usage was highest on the three trails which are known to be popular with tourists (i.e. Bog, Middle Head, and Tiverton). The Lunenburg Back Harbour Trail received only limited local use, while the Cape Chignecto and Blomidon trails were found to have the lowest uses. Given that Cape Chignecto was a new trail this year and only open from late-June, it is expected that its rate of use will increase in subsequent years.

Economic Impacts

The average spending per party for non-Nova Scotians was about $1,210 which breaks down to about $1,120 per party beyond a 30 minute drive and about $90 within a 30-minute drive of the trail. In contrast, the average spending per party for Nova Scotian tourist parties was $210, of which about $130 occurs beyond the 30 minute drive range and about $80 within the 30 minute range. The average spending per party for Nova Scotians living within a 30-minute drive of the trail was only $2.50.

Aggregate expenditure associated with the use of trails was estimated at $90.5 million, with $79.4 million derived from tourist trails and $11.1 million from hiking/walking trails. Urban trail users were found not to make expenditures in connection with their trail use. Non-Nova Scotians accounted for the bulk of the spending ($86 million), and total spending beyond the 30 minute drive of trails accounted for $83.3 million.

When adjusted to take into account the influence of the trail system, the aggregate spending of trail users declined to $34.3 million. The trail incremental portion of spending also dropped to $28.3 million when the influence of particular trails was used. Although, hiking/walking trails were responsible for only about 12% of aggregate spending by trail users, these trails accounted for 16% to 25% of incremental spending.

Future Trail Development

Recommendations for future trail development were focused in the following areas:

- Improving trail information;
- Improving road signage;
- Providing more interpretative information;
- Providing more trail maintenance and upgrading;
- Increasing trail promotion;
- Reviewing multi-use management policies
- Preventing crowding and over-development;
- Adding more facilities; and,
- Creating new trails (especially ones with coastal and scenic views).

Many of these suggestions would be inexpensive to implement, but have the potential to increase usage of Nova Scotia trails, according to survey respondents. Respondents indicated that some small, cost-effective changes would increase their usage of Nova Scotia trails. Only the recommendations pertaining to facilities and new trails would incur much spending. The decision to implement these recommendations will have to be made on a trail by trail basis dependent on funding and community support.

Appendices

The appendices to this report include:

- Background information and methodology issues (a discussion of other trail users and economic impact surveys, a review of other studies on the economic impacts of trails, a description of the methodology and counting problems, a review of other studies measuring trail use, references);
- English and French copies of the questionnaire;
- A discussion of how total trail use was estimated;
- The detailed survey results;
- An interviewer procedure manual;
- A customized survey manual; and,
- Survey comments.

A separate Customized Trail Users Survey Manual was also prepared in this study to assist community groups and other associations interested in conducting similar trail research.

I. Introduction

The recently released Nova Scotia Tourism Strategy identified a primary objective "to develop products and experiences in which Nova Scotia has a competitive strength, which have market appeal and which have the potential to contribute to increased demand and spending". Given that Nova Scotia's natural environment has become the foundation of its attractiveness to both residents and visitors, it comes as no surprise that specific actions of the strategy are directed at enhancing the competitiveness of our nature tourism product. Specific actions of the strategy, as they relate to this initiative, include:

- Develop and sign trails for hiking, cycling, walking; this includes developing abandoned rail lines for these uses, and supporting the development of the Trans-Canada Trail in the province.
- Further develop and enhance other key outdoor products identified by current research, such as: hiking, cycling, snowmobiling, birding, fossil/rockhounding.

Tourism surveys indicate that almost 60% of Nova Scotia's current visitors seek out recreational walking opportunities, while almost 20% look for wilderness hiking experiences. Many believe this market demand, combined with Nova Scotia's outstanding nature product, translates into economic opportunity.

Although there are challenges in gathering user and economic data for trails, there are obvious benefits to this type of research. A number of trail studies have found that non-resident expenditures were greater than those of residents. The Ghost Town Trail study in the State of Indiana concluded that additional marketing and advertising was necessary to increase the visitation of non-resident trail users in order to increase the economic impacts for the local region. It also recommended that the business community provide a more inviting entry for trail users at one entrance lacking trail amenities, to increase the volume of tourist trade. The Bruce Trail study in Ontario found there was a need for tourism and economic development agencies and area municipalities along the trail to recognize the existing tourism importance of the trail and potential for new economic development related to trail use and users. The United States Parks Service's study on rail-trails provided information to assist in the planning, development and management of these kinds of trails. It also concluded that marketing efforts were necessary to attract out-of-town visitors and encourage them to make overnight stays. These studies also identified a dedicated core of users which managers of existing trails and planners of new trails could tap into as a volunteer base to assist in appropriate planning and management activities.

1. Research Objective

Despite the attention currently being devoted to trail development by various levels of government and community groups, very little information on Nova Scotia trail users or the resulting economic impacts currently exists. The underlying objective of this project, which was sponsored by the Nova Scotia Department of Economic Development and Tourism, the Nova Scotia Sport and Recreation Commission and Human Resource Development Canada, is to generate information that will guide trail development policies and funding decisions over the next few years. The study will also enable community development associations to form realistic expectations for the economic benefits of trail development.

Specifically, the study will:

1. Quantify trail usage by user type (i.e. pedestrian, ATV, bicycle) for the study trails.
2. Profile trail users and their expenditure patterns.
3. Identify the most cost-effective opportunities for trail development and trail enhancement initiatives.
4. Assess the economic impact of trail user expenditure patterns for groups such as tourists and non-residents using survey data and the Nova Scotia Tourism Economic Impact Model (NSTEIM).

II. The Trails

- Dartmouth Urban Trail
- Lunenburg Back Harbour Trail
- Cape Split (King's County) (subject to landowner permission)
- Blomidon Provincial Park (King's County)
- Middlehead Trail (Cape Breton Highlands National Park)
- Bog Trail (Cape Breton Highlands National Park)
- Seaside Adjunct (Kejimkujik National Park)
- Cape Chignecto Provincial Park Trail (Cumberland County)
- Tiverton Balancing Rock Trail
- Guysborough Rail Trail (Guysborough County)

1. Trail Descriptions

Dartmouth Urban Trail

The Dartmouth Urban Trail is an urban trail (less than 5 km) that skirts along Lake Banook, Micmac Lake and Lake Charles and links with a number of trails in Shubie Municipal Park. It is a well-maintained, wide trail with multiple entry points made to accommodate walkers, joggers, bicycles, and dog-walking. Along Lake Banook, the trail consists of a sidewalk and lakeside boardwalk. A sidewalk connects this part of the trail to the rest of the trail that is surfaced with fine crusher dust. The trail winds through the mature forests of Shubie Park where it eventually leads to the Shubie Canal and a trail that returns to the parking area near the Shubie Park campground.

Other parking areas for the trail are found at the entrance to the trail off the Micmac Mall exit off of the circumferential highway, along Highway 118, and at the Fairbanks Interpretive Centre. Signs along the trail indicate that the trail is a multi-use trail and maximum speed signs are posted for bicycles in certain high traffic areas. The multi-use trail also provides access to a supervised beach on Lake Charles and connects to trails which offer interpretation on the historic Shubenacadie Canal. It is used predominantly by local people and it receives heavy use in the evenings and weekends.

Lunenburg Back Harbour Trail

The Lunenburg Back Harbour Trail is a relatively new urban "rails-to-trail" trail (less than 5 km) which offers fitness opportunities for local people and views of Lunenburg's Back Harbour. It is a wide, well-maintained trail surfaced with fine crusher dust that is suitable for multi-use purposes such as jogging, bicycling, walking and dog walking. Rest areas with park benches are located in areas with views. Trail users can either return the same way along the trail or walk back along roads through the Town of Lunenburg. Parking is available at the old train station that has been converted into a Police Station, and along the shoulders of roads that cross the trail at different entry points. This lightly used trail is used predominantly by local people.

Cape Split Trail

The Cape Split Trail located north of Scots Bay, is a well-established trail (6.4 km) located on private land that features a spectacular view of high cliffs and racing tides in the Minas Basin. The trail winds through mature forests and offers opportunities for beachcombing and birdwatching at its end. The trail is well groomed but it is undeveloped as noted by the absence of safety barriers such as railings around viewing areas and facilities. A sign located at the boundary of the private land provides the only warning of hazards on the trail.

There is no other signage other than a sign at the trailhead that gives the trail length and reminds users to pack out their garbage. The trail surface is not maintained and can get wet and muddy during periods of rain. Most trail users return the same way, while there are a few undeveloped backcountry campsites that get limited use, and some undeveloped trails that offer another way to return to the main trail from the beach. The trail is heavily used.

Blomidon Provincial Park Trail

The Blomidon Trail, located in Blomidon Provincial Park north of Canning, is a 13.7 km system of interconnected trails that provide access to a variety of habitats and offer numerous panoramic views of the Minas Basin. Included in this trail system is a two-loop 1.1 km self-guiding interpretive trail which provides interpretive information on the hardwood and softwood forest ecosystems of Nova Scotia. The Jodrey Trail (6 km) winds through a sugar maple, yellow birch and beech forest and skirts 183 metre vertical cliffs providing numerous viewing stations overlooking the Minas Basin. It connects to the Look-off Trail (1.6 km) which provides views of the Minas Basin and Five Islands Provincial Park.

The Woodland Trail (3.2) provides an interior route back from the Look-off Trail and winds through forest habitats of sugar maple, yellow birch and beech and white spruce and balsam fir. The Borden Trail (1.9 km) is another interior trail that passes through a predominantly white spruce forest and skirts a series of waterfalls. The trail system is used by tourists and local people.

Middle Head Trail

The Middle Head Trail, located in Cape Breton Highlands National Park near Ingonish is a self-guiding trail (4 km return) which features the Victoria Coastal Plain and sea stacks. It is a well-established trail that consists of a former road and walking path. It is a stacked loop that allows hikers options in hiking distances. Interpretive signs provide detailed information on the local vegetation, wildlife, and history of human settlement in the area. Benches are also provided at strategic viewing areas. Guided tours are available from staff at nearby Keltic Inn. In the winter, this trail is used for cross-country skiing. It is well used mostly by tourists.

Bog Trail

The Bog Trail, located in Cape Breton Highlands National Park inland from Corney Brook, is a wheelchair-accessible, self-guiding boardwalk loop (0.8 km) which features insect-eating plants, orchids and the opportunity to view moose. It is a well-established trail that is well advertised. Interpretive displays provide information on the vegetation and wildlife of this area high on the barrens of the park. This trail is heavily used because of its accessibility, amenities, short distance and natural history. It is mostly used by tourists.

Kejimkujik Seaside Adjunct Trail

The Keji Seaside Adjunct Trail, located near the community of St. Catherines River, is a well-maintained old cart track that provides access to St. Catherines River Beach (6 km return). This trail passes through a mixed forest of conifers, oak, aspen and maple which changes to a forest of white and black spruce and balsam fir near the coast. It features unique vegetation, dramatic rock formations, secluded coves and variety of bird life and wildlife. The trail leads to a breeding area of endangered Piping Plovers which has restricted access at certain times of the year. It is used predominantly by tourists.

Cape Chignecto Provincial Park Trail

The Cape Chignecto Trail, located in Cape Chignecto Provincial Park near West Advocate is a challenging long distance coastal trail with 30 backcountry hike-in campsites. The park is dominated by the western extension of the Cobequid Hills and elevations reach 274 metres at the highest point. This trail features many kilometres of pristine coastline, significant geological features, deep valleys, sheltered coves, rare plants, remnant old growth forest, and a rich cultural heritage. The trail winds through red spruce, balsam fir, red maple, sugar maple, beech, yellow birch, and white birch forests.

Currently 36 km of trail have been built, but when completed the trail will be close to 45 km long (including 29 km of coastline) and include an interior section which will make the trail one large loop. The trail descends into steep-sided canyons at McGahey Brook, Mill Cove and Refugee Cove. Day use visitors typically hike into McGahey Brook returning either the same way or back along the Bay of Fundy shoreline which offers opportunities for beachcombing, or hike into Mill Cove returning the same way. Designated viewing stations offer views from the 185 metre cliffs of the Minas Basin. An extensive inter-tidal shoreline is exposed at several places during low tide due to the mean tidal range of 8 metres in the area. This trail is used predominantly by tourists and receives light traffic.

Tiverton Balancing Rock Trail

The Tiverton Balancing Rock Trail, located on Long Island, is a 1 kilometre trail which leads to a large basaltic column of rock that has eroded away from the ridge of basalt. For more than 200 years, this rock has stood precariously balanced on its natural rock platform. It also features ocean vistas in St. Mary's Bay, and unique bog vegetation such as orchids, northern pitcher plants, lambkill and skunk cabbage. Other plants featured along this trail in the bog and along the forest floor include witherod, Canadian holly, false mountain holly, cinnamon fern, Indian pipe, starflower, wood sorrel, bunchberry and scrubby cinquefoil.

It has raised boardwalks and a number of steps that lead down to the famous balancing rock. Interpretive displays provide information on the bog habitat and its unique vegetation and on the geology of the featured rock. A plant guide brochure is also available to provide more information on plants found along the trail. This heavily used trail is predominantly used by tourists.

Guysborough Rail Trail

The Guysborough Rail Trail, located outside the village of Guysborough is a relatively new rails-trail (7 km) which is part of the Trans Canada Trail. It is an inland trail with some coastal views, offering nature experiences, hiking, birdwatching, and other outdoor recreational activities. It features unique trail edge habitat and history. Approximately 7 km of the trail has been covered by crusher dust. With multiple entry points, there is light multi-use including ATVs. It has mainly local use and it has not been well advertised. This trail was dropped from the study mid-summer due to low trail usage.

The locations of these trails are shown on the map in Figure 1. The characteristics and features of these individual trails are described further in Table 1.

2. Trail Types

For the purposes of data analysis, the 9 study trails were divided into three different trail types that included tourist, urban, and hiking/walking trails.

The **tourist trails,** which include the Bog Trail, Tiverton Balancing Rock Trail, and Middlehead trails, attract mostly tourists. These trails have unique features or scenery that attract tourists and are located in areas that receive many tourists. Tourists are defined in this study as visitors who travel at least 80 km from their home or stay overnight on their trip. (This is the same definition used by the Department of Economic Development and Tourism in their visitor exit surveys.)

The **urban trails,** which include the Dartmouth Multi-Use Trail and the Lunenburg Back Harbour Trail, are located in urban areas used predominantly by local people. Many of the users on these trails are frequent visitors who are using the trails for recreation and exercise.

The **hiking/walking trails,** which include the Keji Seaside Adjunct, Blomidon Provincial Park, Cape Split, and Cape Chignecto Provincial Park, are used by a mix of trail users including local visitors and tourists. Users of these trails often spend more time on the trail than on the two other types of trails because of their length, level of difficulty, and distance from urban and tourist centres.

The detailed survey results in Appendix D show the results according to trail type. In the discussion of these results, significant differences between trail types are identified.

Figure 1: Nova Scotia Study Trails

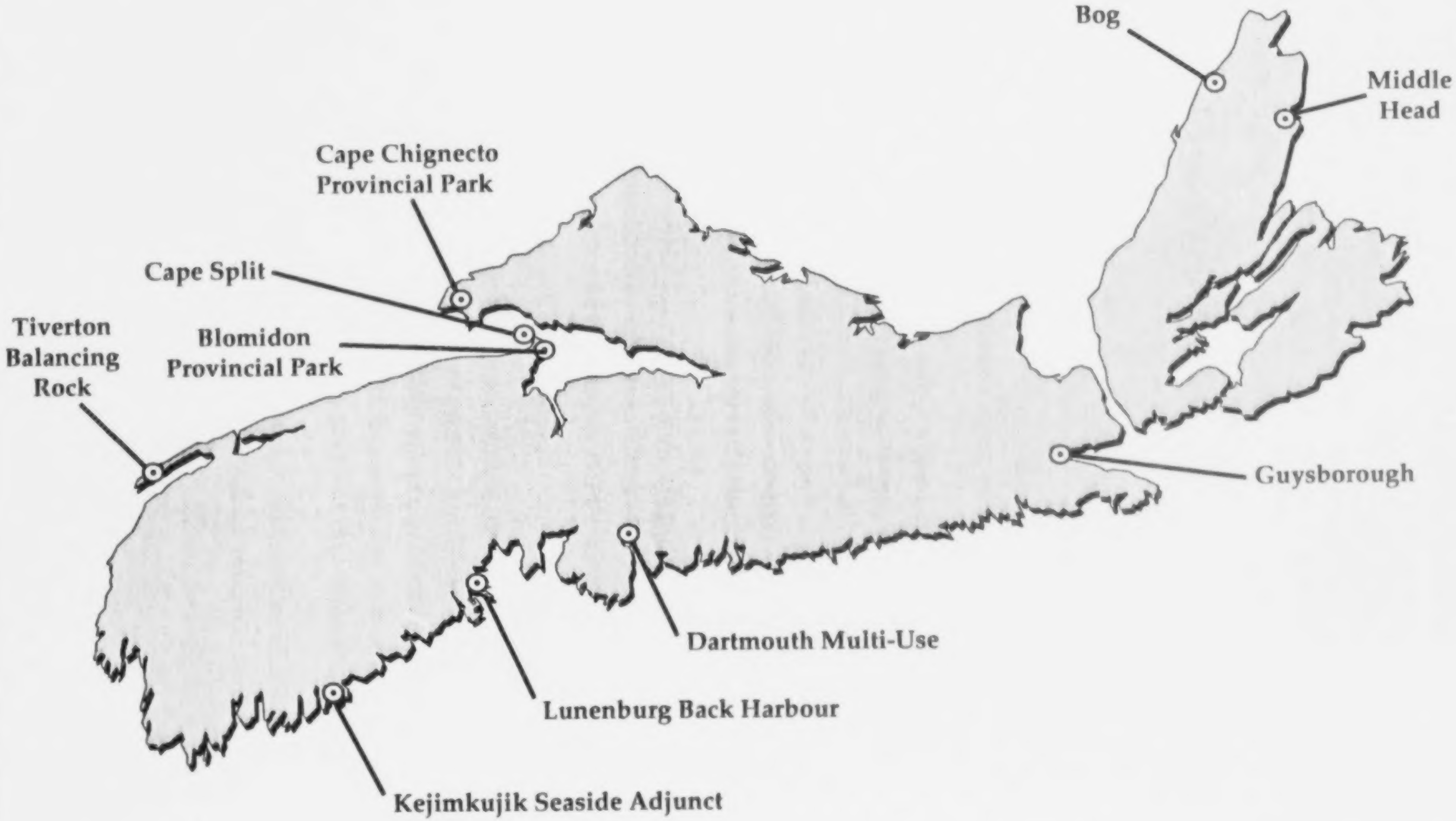
Bog
Middle Head
Cape Chignecto Provincial Park
Cape Split
Tiverton Balancing Rock
Blomidon Provincial Park
Guysborough
Dartmouth Multi-Use
Lunenburg Back Harbour
Kejimkujik Seaside Adjunct

Table 1
Study Trail Matrix

	Dartmouth Urban	Lunenburg Back Harbour	Cape Split	Blomidon	Middlehead	Bog	Keji Seaside Adjunct	Cape Chignecto	Tiverton
Owner	municipal	municipal	private	provincial	federal	federal	federal	provincial	municipal
Designation	municipal trail	municipal trail	private	provincial park	national park	national park	national park	provincial park	municipal trail
Length	Less than 5 km linear	Less than 5 km linear	16 km return	13 km loop	4 km return	800 m loop	12 km return	30 km linear	1 km linear
Difficulty	easy	easy	challenging	challenging	moderate	easy	easy	very challenging	easy
New	relatively new	relatively new	established	established	established	established	relatively new	new/not completed	relatively new
Multi-use	bikes	bikes	bikes	hiking only	x-country skiing	wheelchairs	hiking only	hiking only	hiking only
Rural/Urban	urban	urban	rural	rural	rural	rural	rural	rural	rural
Facilities	benches, garbage	benches, garbage	none	viewing areas	benches, garbage	many amenities	outhouse	backcountry campsites	benches, viewing area
# Entry Points	many	many	one	several	one	one	one	two	one
Features	forested	rails-to-trails, ocean views	ocean views, cliffs	coastal/cliff	coastal plain/sea stacks	bog, moose	beach, seals, piping plovers	coastal/cliff, beaches, coves	balancing rock, ocean view, bog
Interpretation	no	no	no	yes	yes	yes	no	no	yes
Level of Use	mod. to heavy	low	heavy	heavy	heavy	very heavy	low	low	heavy
Users	mostly local	mostly local	tourist	local/tourist	tourists	tourists	mostly tourist	mostly tourist	mostly tourist
When Used	more on weekends/evenings	more on weekends	more on weekends	more on weekends	more on weekends	weekdays and weekends	more on weekends	more on weekends	more on weekends
Links	to Shubie Park	to downtown	to beach	to campground	to Keltic Lodge	to Cabot Trail	to beach walk	to beaches	none
Advertised	signs only	at VIC	not formally	pamphlets	well advertised	well advertised	advertised	advertised	advertised

III. Profile of Trail Users and Trail Use

Survey Response Rate

In total, the surveyors conducted 556 interviews[1] on the nine study trails. The overall response rate was 65%, meaning the refusal rate was 35%. However, the refusal rate varied for each trail and for the summer and fall seasons. The refusal rate was highest on the two urban trails (i.e., 51% on Dartmouth Multi-Use Trail and 46% on Lunenburg Back Harbour Trail) and lowest on the four hiking/walking trails (i.e. 12% on Blomidon Provincial Park Trail, 23% on Keji Seaside Adjunct, 26% on Cape Split Trail, and 33% on Cape Chignecto Trail). The fall refusal rate was lower than the summer refusal rate on all of the trails except for the Cape Chignecto and Lunenburg Back Harbour trails.

1. Type of User

The interviewers recorded the types of users they interviewed based on their observations. Users other than walkers or hikers were also identified in Question 17 that asked respondents to list the activities that they undertook on the trail that day. Most of the respondents surveyed (95%) were walkers or hikers. The remaining trail users included 16 cyclists (3%) and 10 joggers (2%).

Origin of User

Respondents in Question 1 were asked to provide their permanent place of residence. This information is summarized in Table 2.

Table 2
Origins of Trail Users

Origin	Respondents	Percentage (%)
Nova Scotia	224	40
Other Canadian Provinces	122	22
United States	161	29
Other Foreign Countries	49	9
Total	556	100

* Percentages may not add up to 100 due to rounding.

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[1] Note: Two additional surveys completed on the Guysborough Trail, which was subsequently dropped from the study, were not included in any of the data analysis.

Nova Scotia residents comprised 40% of the respondents, of which 42% were from Halifax or Dartmouth. Another 22% of the respondents resided in other Canadian provinces. Respondents came from the 9 other provinces, but 59% of these respondents came from Ontario. Quebec was the next most represented province with 13% of the other province respondents. Another 29% of respondents were from the United States. While these American respondents came from 34 different States (plus the District of Columbia), 60 or 37% of them were from Massachusetts and New York. Forty-nine or 9% of the respondents resided in 14 other countries including 10 European countries.

Trail users from Nova Scotia constituted 96% of the urban trail users, 58% of the hiking/walking trail users, and 15% of the tourist trail users. The ratio of Nova Scotian trail users using hiking/walking trails versus tourist trails was 2.8:1. In comparison, the ratio of other Canadians and U.S. residents using tourist trails versus hiking/walking trails was 2.8:1, and 2.7:1, respectively. Foreign trail users (excluding U.S. trail users) were in contrast, split roughly equally on the tourist and hiking/walking trails.

Nova Scotia Residents Living Within 30 Minute Drive of the Trail

One hundred and nineteen or 21% of the respondents reported living within a 30-minute drive of the study trails in response to Question 8. This represents 53% of the Nova Scotia respondents in the study. When the respondents from the Dartmouth Multi-Use Trail and the Lunenburg Back Harbour Trail were excluded from this question, there were only 35 or 6% of respondents living within a 30-minute drive of the study trails. As expected, very few (less than 1%) of the tourist trail users lived within a 30 minute drive of the trails, whereas 94% of urban trail users and 16% of hiking/walking trail users lived with this perimeter. This 30 minute drive criterion was used to determine whether respondents were from the local area, in which case they were excluded from Questions 9 and 10 which concerned the motivation for respondents to take a trip in Nova Scotia and visit the local area around the study trails.

Age and Sex of Interviewees

Interviewees were asked to identify their age and sex, and those in their group in Question 19. However, the surveyors did not in every survey identify the interviewee from other group members due to more than one person in a group answering the questions, and reporting irregularities. As a result, only the age of 488 or 91% of the interviewees and the sex of 455 or 85% of the interviewees were identified. The age categories of the interviewees are shown in Table 3.

Table 3
Interviewee and Group Members by Age

Age Category	Interviewees	Percentage of Interviewees (%)	Group Members	Percentage of Group Members (%)
0-14	0	0	72	7
15-19	1	0	22	2
20-24	25	5	44	4
25-34	99	20	197	18
35-44	113	23	218	20
45-54	121	25	259	24
55-64	79	16	173	16
65-74	45	9	94	9
75 and over	5	1	11	1
Total	**488**	**100**	**1,090***	**100****

Note: * The total number of group members shown in this table is less than the 1,200 identified in the surveys, because the age of some group members was not known.
** Percentages may not add up to 100 due to rounding.

The percentages of interviewees in each age category corresponded to the ages of all of the group members, except in the 14 and under category, as surveyors did not select interviewees from this age group. The highest percentage of interviewees was between 45 and 54 years of age, and 84% of the interviewees were between 25 and 64 years in age.

Of the 455 interviewees whose sex was identified, 213 or 47% of them were female and 242 or 53% of them were male. This sex distribution contrasts with the 53% female and 47% male split for all of the group members. Therefore, slightly more males were interviewed than females from a user group that was represented by slightly more females. This may be responsible for a small male bias in the study.

Age and Sex of Group Members

The number of female group members (631 or 53%) was slightly higher than the number of male group members (568 or 47%). Approximately 64% of the male group members hiked alone, while 54% of the female group members hiked alone. While the number of males hiking alone was greater than the number of females hiking alone, there were more female groups with 2 to 4 members, and more male groups with 5 or 6 members.

As shown in the table above, the highest percentage of group members were between 45 and 54 years of age, and 78% of these were between 25 and 64 years in age. The age distribution of male and female trail user parties varied on the three different types of trails. More males in the age categories including 14 and less and 35-74 years of age used the tourist trails, while more males in the 20-24, and 25-34 age categories used the hiking/walking trails. Female trail parties followed a similar pattern except the number of female parties using hiking/walking trails and tourist trails was nearly equal in the 25-34 age category.

As the total number of group members including both interviewees and members of parties interviewed was 1,200 and 556 groups were surveyed, the average group size per interview was 2.

Education

While Question 30, which asked respondents to identify their highest level of education, was considered sensitive enough to place it at the end of the survey with the household income question, 97% of the interviewees answered this question. Most of the respondents reported being highly educated as shown in Table 4 below. The university complete category was the most frequently chosen education category, selected by 62% of the respondents. Another 23% of the respondents had some university/college or technical school education.

Table 4
Education Levels of Respondents

Level	Interviewees	Percentage (%)
High school incomplete	9	2
High school complete	71	13
Some university/college/technical school	124	23
University complete	334	62
Total	538	100*

Thus, at least 85% of the respondents had either completed university or had some university/college or technical school education. Only 2% of the respondents had not completed their high school education. Other trail studies including the Bruce Trail study have found that trail use on hiking trails tends to increase with education level, which is linked with income and occupation.

Trail users on the urban trails reported lower education levels. Only 58% of urban trail users had either completed university or had some university/college or technical school education, while 7% of them had not completed their high school education.

Household Income

Respondents were asked to indicate the category in which their total household income (before taxes) fell, in Question 31.[2] This information is summarized in Table 5. One hundred and eighty-eight or one-third (34%) of the respondents elected not to respond to this question. The greatest percentage of trail users who responded to this question had total household incomes greater than $80,000[3] (41%). However, respondents who selected this highest income category represented 57% of tourist trail users, 34% of hiking/walking trail users, and 14% of urban trail users.

Table 5
Gross Household Income of Respondents

Income Category	Responses	Percentage (%)
Less than $30,000	36	10
$30,000-$39,999	37	10
$40,000-$49,999	34	9
$50,000-$59,999	43	12
$60,000-$69,999	40	11
$70,000-$79,999	26	7
$80,000+	152	41
Total	**368**	**100**

Approximately 90% of the respondents who answered this question had a total household income equal to or greater than $30,000. However, these respondents with incomes equal to or greater than $30,000 represented 95% of tourist trail users, 88% of hiking/walking trail users, and 66% of urban trail users. According to Statistics Canada, the average household income in Canada in 1996 was $48,552 (Statistics Canada, 1998). At least 71% of the respondents who responded to this question had an average income above the national average.

User Experience

When asked about their personal trail use in Question 3, the most frequently chosen response (35%) was that respondents were comfortable using a trail for one to two hours. In fact, 79% of the respondents reported that they were comfortable using trails for four hours or less. Only 6% of the respondents reported being comfortable on a backpacking trip. A higher percentage of trail users on hiking/walking trails were comfortable for more than 4 hours on a trail, compared to other trail users.

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[2] Where respondents reported their income in $US, the figure was converted to the Canadian dollar equivalent using an exchange rate of $Can 1.45 = $US 1.00.

[3] There is a possibility of non-response bias here. For example, if those declining to answer the question are predominantly in the lower income ranges, the income estimate may be high. Given that we were primarily interested in establishing a high-middle-low income split, rather than a precise estimate of average income, this is not a serious issue.

2. Trail Use

Use of Nova Scotia Trails

Respondents were asked how many times they had used Nova Scotia trails in the last 12 months (including the study trail) in Question 4, and how many different trails they had used in the province during this time period in Question 5. The average number of times that respondents reported using a trail in Nova Scotia in the last 12 months was 34.0. However, when the 5% outlying responses were excluded from the data, this number (the 5% truncated mean) dropped by half to 17.4. Furthermore, 41% of the respondents used a Nova Scotia trail only once in the past 12 months.

The average number of different Nova Scotia trails used by respondents in the same time period was 3.3. However, 41% of the respondents used only one trail. Hiking/walking trail users used more trails than tourist trail users. That is, 43% of tourist trail users and 34% of hiking/walking trail users used only one trail, whereas 87% of tourist trail users and 78% of hiking/walking trail users used less than 5 trails.

Use of Trails Outside of Nova Scotia

Respondents were asked how many times they had used a trail outside of the province in the last 12 months in Question 6. The average number of times that respondents reported using a trail outside of Nova Scotia in the last 12 months was 27.4, but again this number dropped to 12.2 when the 5% truncated mean was used. When frequent users were excluded from the data, 88% of the respondents were found to use 6 or less trails outside Nova Scotia.

As expected, urban trail users used fewer trails outside of Nova Scotia than other trail users and 65% of urban trail users had not used any trails outside of Nova Scotia. Also, more tourist trail users used at least 10 trails outside of the province compared to other trail users.

Experience Sought from the Trails

Respondents were asked in Question 7 to list the type of experiences that they were seeking from the trails they used, and the interviewers re-coded the answers into 14 categories of experiences. Respondents were not prompted but were permitted to mention as many as 4 types of experiences. The most frequently selected experiences chosen by respondents were mental/physical health benefits (39%), experiencing wilderness (16%), exploring new places (16%), nature appreciation/study (15%), and wildlife (10%).

The "other" category was also selected by 218 or 39% of the respondents. When these answers were examined, they were found to fit within the listed categories provided, although different language was used. The three categories that these other answers corresponded to most often were scenery, mental/physical health benefits, and nature appreciation/study.

Less than a third (28%) of the respondents mentioned experiences from the other 7 categories which included: solitude (7%), family outing (6%), being with people (5%), no single experience (5%), pleasure/fun (4%), developing skills (1%), and challenge to abilities (0%).

Trail users reported seeking different kinds of experiences from the different types of trails. For example, trail users on tourist trails were more interested in nature appreciation/study, wildlife, no single experience and exploring places, whereas trail users on hiking/walking trails were seeking more wilderness, wildlife, and new places to explore. The mental/physical health benefits were also selected by more respondents on urban trails (71%), compared to hiking/walking trail users (43%) and tourist trail users (25%).

Influence of the Nova Scotia Trail System

Question 9 was broken down into two parts to deal with the different influence the Nova Scotia Trail System had on out-of-province trail users and Nova Scotia resident trail users.

Out-of-Province Trail Users

Out-of-province trail users in Question 9a were asked how much influence, if any, the system of hiking trails in Nova Scotia had in determining their choice of Nova Scotia as a stop or destination on their trip. The average ranking by respondents of this influence on a scale between 0 (no influence) and 10 (single main reason) was 4.0. Zero was the most frequently chosen answer (34%), but more than 50% of the respondents selected numbers between 5 and 10. Tourist trail users selected 0 more often (37%) than other trail users.

Nova Scotia Residents

Nova Scotia resident trail users in Question 9b were asked how much influence, if any, the system of hiking trails in Nova Scotia had in determining their choice to take their trip within Nova Scotia. The average ranking by respondents of this influence on a scale between 0 (no influence) and 10 (single main reason) was 5.2. However, the most frequently selected numbers were 0 (32%) and 10 (30%). Approximately 54% of tourist trail users and 22% of hiking/walking trail users selected 0, whereas 36% of the hiking/walking trail users and 17% of tourist trail users selected 10.

Influence of the Particular Study Trail

Respondents were asked in Question 10 how much influence, if any, the particular study trail (i.e. the trail on which they were surveyed) had in determining their visit to the area. The average ranking by respondents of this influence on a scale between 0 (no influence) and 10 (single main reason) was 4.4. Again, the most frequently selected numbers were 0 and 10, and more tourist trail users selected 0 (55%), while more hiking/walking trail users selected 10 (40%).

Source of Trail Information

Respondents were asked in Question 11 how they found out about the study trail they were visiting. This information is summarized in Table 6. Word of mouth from friends, family or a local person was the source of trail information cited most often by respondents (30%). The next highest percentage of respondents (22%) reported having "general knowledge" of the trail. That is, they always knew about the trail or they knew about the trail because it was close to where they lived. In that case, they were unable to list a more specific source of trail information. The next most frequently cited sources of trail information included road maps (19%), tourism information centres (14%), brochures (12%), books (11%), and signage/driving past (9%).

Table 6
Sources of Trail Information

Information Source	Responses	Percentage of Respondents* (%)
Word of mouth	169	30
General knowledge	120	22
Road maps	103	19
Tourism information centres	79	14
Brochures	68	12
Books	61	11
Signage/driving past	52	9
Other	37	7

* Multiple responses mean the percentages add to more than 100.

Respondents from the different trail types used different sources of trail information. That is, urban trail users relied mostly on general knowledge and word of mouth, whereas hiking/walking trail users used those two sources plus books, tourist information centres, and road maps; and tourist trail users used road maps, word of mouth, tourist information centres, signage, and brochures.

Other Sources of Trail Information

Respondents were asked in Question 12 whether they used additional sources of information for other Nova Scotia trails. More than half of the respondents (55%) reported using additional information sources. The most frequently cited sources of additional trail information included books (50%), tourism information centres (28%), brochures (28%), word of mouth (18%), and road maps (11%).

While respondents were not asked directly about the types of books they used for trail information, interviewers recorded the titles of books mentioned by 50 respondents. *The Doers and Dreamers Guide to Nova Scotia* was cited 36 times (72%). Other books mentioned included Michael Haynes' *Guide to Hiking Trails in Nova Scotia* (16%) and travel guides including Frohmer's (8%) and Fodors (4%).

Time Spent on the Trail

Respondents in Question 14 were asked how much time they spent on the trail on the days they were interviewed. The average length of time spent on the trails per visit was 2.0 hours.

Frequency of Trail Use

Respondents were asked how many times they had used the study trail in the last 12 months in Question 15. The average number of visits to the study trails was 42.2. This figure drops to 24.4 when the 5% truncated means is used.

Respondents who had used the study trails before were asked in Question 16 to indicate how often they used the specific trails in summer (June to August), fall (September to November), winter (December to February), and spring (March to May). Summer trail use was the highest (179 trail users or 32% of the respondents), but more of the respondents were using the trails less frequently (less than once per month), especially on the tourist and hiking/walking trails. Winter use was the lowest (114 trail users or 21% of the respondents), while spring and fall use were roughly comparable (122 and 132 trail users or 22% and 24% of the respondents, respectively) and fell in-between summer and winter use.

There were very few frequent users on the tourist trails throughout the year, except for some respondents who used the trails less than once per month in the summer. More than 70% of the hiking/walking trail users used these trails less than once per month in the fall, spring and winter, while in the summer this dropped to 52%.

Almost all of the daily use took place on urban trails. The number of respondents who reported using the trails daily did not change much through the seasons (26-33), indicating that some hard-core users continue to use the trail just as frequently in the off-season.

Trail Activities of Respondents on the Day Surveyed

Respondents were asked to indicate which activities they undertook on the trail on the day they were surveyed from activities listed in Question 17. This information is summarized in Table 7 below. As shown already in the discussion of type of user, most of the trail users (95%) were walking or hiking, while 16 (3%) respondents were cycling and 10 (2%) were jogging. The most frequently cited activities undertaken on the study trails included photography (42%), wildlife viewing (39%), birdwatching (34%), and nature study (31%). In addition, 14% of the respondents were picnicking, and 3% were backpacking. Only a couple of trail users were painting, commuting or fishing. Walking/hiking trail users were doing more backpacking, biking and picnicking than other trail users, while tourist trail users were more involved in nature study activities, and more urban trail users were jogging.

Table 7
Activities of Respondents

Activity	Responses	Percentage of Respondents* (%)
Walking/hiking	546	95
Photography	236	42
Wildlife viewing	217	39
Birdwatching	188	34
Nature study	171	31
Picnicking	77	14
Other	61	11
Backpacking	17	3
Biking	16	3
Jogging	10	2
Painting	3	1
Commuting	2	0
Fishing	1	0

* Multiple responses mean the percentages add to more than 100.

Other Activities Generally Undertaken on Trails

Trail users were also asked what other activities they generally participated in when using trails. The three most frequently cited activities were cycling (24%), cross-country skiing (20%), and photography (20%). The number of trail users who cycled generally on trails was much higher than the number of respondents who were observed cycling on the study trails.

The next most common activities reported were wildlife viewing (13%), birdwatching (11%), picnicking (10%) and nature study (10%). The number of respondents who reported jogging (7%), backpacking (7%), and fishing (4%) generally on trails, was also higher than the number of respondents who were actually doing these activities on the study trails when interviewed. Less than 5% of the trail users reported being involved in other winter activities such as snowshoeing (3%) and snowmobiling (2%). A few respondents also reported swimming (3%), horseback riding (2%), ATV riding (1%), and painting (1%) when using trails.

All three types of trail users reported cycling as an activity they undertook generally on trails. Cross-country skiing was undertaken more by hiking/walking and tourist trail users, than by urban trail users. Hiking/walking trail users reported generally doing more backpacking, picnicking, and biking, while tourist trail users reported doing more nature study and fishing, and urban trail users reported doing more jogging.

IV. Trail Conditions

1. Trail Condition Variables

Respondents were asked in Question 23 to indicate whether there should be more, less, or the same amount of listed trail condition variables. Overall, the majority of the respondents reported that the study trails should stay the same. The percentage of respondents who thought the trail should stay the same was greater than or equal to 60% for all of the variables except for "camping nearby" and "accommodations nearby". These last two variables received the highest percentage of "no opinion" answers (58%, and 54%, respectively) because they were not relevant to all of the respondents. That is, neither variables were relevant to local trail users, while only one or the other was relevant to tourists, depending on whether they were camping or staying at fixed-roof accommodations. Some respondents also had no opinions about washrooms (9%), trail information brochures (9%), and parking spaces (7%), suggesting these variables were not as important to some trail users.

While trail users reported that they generally liked the trails the way they were, some respondents identified trail condition variables that could be improved. This information is summarized in Table 8. The three variables which the highest percentage of respondents wanted to see more of included interpretive information on the trail (37%), direction and distance markers on the trail (34%), and drinking water (29%). A smaller percentage of trail users also reported wanting to see more trail information brochures (24%), the trailhead better identified on the road (24%), more washrooms (22%), and more garbage cans (20%). Even fewer respondents reported wanting to see more of the remaining 7 trail condition variables which included: rest spots/picnic areas (13%), parking spaces (10%), trail maintenance (9%), structures (8%), scenic viewing areas (7%), hazards marked (7%), and level trail surface (5%).

Table 8
Trail Condition Improvements Recommended

Recommendation	Percentage of Respondents* (%)
More interpretive information	37
More direction and distance markers	34
More drinking water	29
More trail information brochures	24
Trailhead better identified on road	24
More washrooms	22
More garbage cans	20
More rest spots/picnic areas	13
More parking spaces	10
More trail maintenance	9
More structures	8
More scenic viewing areas	7
More hazards marked	7
More level trail surface	5

* Multiple responses mean the percentages add to more than 100.

Few respondents wanted to see less of any of the trail condition variables. A small percentage of trail users noted there should be less of 8 of the variables, but this ranged from 1 to 4 of the respondents for each variable.

In general, fewer tourist trail users asked for trail improvements than other trail users. They recommended improvements in drinking water (26%), interpretive information (21%), direction and distance markers (19%), the identification of the trail on the road (16%), trail information brochures (15%), and washrooms (15%). More hiking/walking trail users wanted more interpretive information (57%), direction and distance markers (53%), trail information brochures (40%), and the trailhead better identified on the road (38%), whereas more urban trail users wanted more interpretive information (49%), washrooms (42%), drinking water (48%), garbage cans (42%), and direction and distance markers (42%).

2. Other Improvements Recommended for Study Trails

Respondents were asked in Question 24 to list any other improvements, additional services or changes they would like to see offered on the study trails that would increase their usage of these trails. The specific recommendations provided are described separately for each trail. The number of comments is indicated in brackets. A complete list of comments provided by respondents to this question is found in Appendix H (pages H-1 to H-11).

Middle Head Trail

Trail users suggested improvements in the signage (27), the trail description in the park brochure (13), the facilities (12), and trail maintenance (10). The most number of comments concerned signage. Trail users wanted to see more directional signs (especially at the end of the trail and where the path forked)(12) and distance markers (4). A number of respondents noted that the marker for the half-way point in the trail was not accurately located (5). A trail sign on the main road was also recommended (3). One respondent recommended posting a sign at the trailhead warning trail users that there was no drinking water available on the trail. One trail user suggested adding hazard signs at the end of the trail to mark dangerous cliffs, while another one recommended a railing be installed there to protect trail users.

Many trail users did not think the description of the trail in the park brochure provided enough information on the trail (6). They recommended more descriptive information and a more detailed map. A few respondents also wanted the brochure to indicate the difficulty and steepness of the trail (6), and to show the exact location of the trailhead (3). They noted that either the park brochure or markers on the trail should warn seniors and other people with disabilities of the difficulty of the trail. One trail user recommended a separate guide or brochure be provided for this trail. Some trail users also recommended there be more interpretive information provided on both scientific (flowers, geology, birds, fish, etc.) and historical topics (8), but they did not indicate if this information should be provided in brochures or on signs along the trail. One respondent suggested the interpretive sign on whales was depressing and should be removed.

Respondents also recommended more facilities be provided including washrooms (6) (especially near the parking lot and the end of the trail), drinking water (2), a picnic area near the beginning of the trail (1), and garbage cans near benches (2).

In the area of trail maintenance, trail users recommended removing dead wood (1), dead trees (3), tree roots (1), and litter from the trail (1). A few respondents found the trail slippery (2) and recommended more gravel be added, while one trail user commented that the gravel surface did not look natural. Another trail user noted that the steps were too wide in places, making walking difficult. To prevent trail users from getting lost, one respondent recommended doing something about off-shoots from the main trail. A loop trail at the end of the trail was also recommended by one trail user.

Bog Trail

Trail users suggested improvements in trail signage (16), coin-throwing (13), road signage (15), facilities (7), trail maintenance and design (6), and the trail brochure (3). Respondents wanted to see more information in the interpretive signs on vegetation (such as grasses, orchids, and trees) and wildlife (9). Some trail users noted that some of the existing signs were damaged (3). Respondents also requested more detailed information about the trail in the park's brochure and suggested including a more detailed map in it (3). Even though the Bog Trail is short, some trail users requested distance markers along the trail (3). Many respondents noted that better road signage was required (15). They recommended providing signs to give motorists more advanced warnings of the trailhead, and more visible entrance and exit signs with arrows.

Many respondents commented that trail users should be discouraged from tossing coins into the pool on the trail (13). They recommended removing the coins and if necessary, placing a sign discouraging or prohibiting people from throwing more coins into the pond.

Suggested improvements to trail facilities included cleaning and improving the washrooms (3), enlarging the parking lot for oversized vehicles such as campers (2), and providing picnic tables (1) and garbage cans (1). In the area of trail maintenance, one respondent noted the boardwalk needed work. Another respondent suggested adding rails along the trail to keep the children off the bog. Other trail users noted the trail was too sloped in places for wheelchairs (1) and recommended the trail be extended (1). One respondent in the fall noted that the trail was slippery when snow covered.

Blomidon Provincial Park Trail

Trail users suggested improvements in trail signage (12), trail maintenance (5), and facilities (4). Respondents felt better directional signs (7) were necessary and noted that some of the "you are here" arrows were missing from some of the existing signs. Many trail users were confused by the existing signage. One trail user suggested numbering the look-offs on the trail so they corresponded to numbered look-offs on the map. Distance markers and information about hiking times were also recommended (3). One respondent recommended labelling the pictures on the interpretive signs along the interpretive trail so people could identify what was described in the text along the trail. Another trail users recommended adding more interpretive information on the main trail.

Trail users recommended improvements in trail maintenance noting branches should be cut (1), tree roots on the trail removed (1), brush cleared (1) and litter removed (1). The trail facilities recommended included viewing areas for birdwatching (1), more rest spots with wider panoramic views (1), benches at look-offs (1), and shaded picnic areas (1). One respondent noted that park brochures were not available at one of the Visitor Information centres in Halifax.

Cape Chignecto Provincial Park Trail

Trail users suggested improvements in signage (9), trail facilities (7), trail maintenance (7) and the park brochure (2). Respondents recommended placing more interpretive signs (on wildlife, human history, and mushrooms) either along the trail or at the park gate (6), and having tidal charts available for trail users (2). One trail user recommended informing trail users that rock hounding is not permitted in the park. Distance markers (4), "you are here" markers (1), signs for falling rocks on the beach (2), and signs on the beach identifying brooks and coves (1) were also recommended. One trail user recommended installing directional signage along the road to help trail users find the trail. Respondents also recommended providing a better trail map (2) and including average hiking times in the park brochure (1).

Suggested improvements to trail maintenance included fixing loose gravel on the trail (1), asking dog owners to pick up after their dogs (1), building up tent pads that were prone to flooding (1), installing railings on a steep stairway (1), fixing steps that were wobbly (1), and installing a bridge at the Refugee Cove campsite so campers can access the campsites on the other side of the stream when it is swollen from rain (1). One respondent was concerned about the pit toilets leaching into nearby streams. Suggested improvements to trail facilities included expanding camping sites (1), providing picnic tables at camping sites (1), creating rest spots with benches on difficult sections of the trail, and at viewing areas and look-offs (3), creating wider scenic viewing areas for more panoramic views (2), providing shaded picnic areas (1) and garbage cans near benches (1), and having some place where trail users could purchase food and cold drinks (1).

Cape Split Trail

Trail users suggested improvements in signage (23), trail maintenance (10), and trail facilities (6). The type of signage recommended included distance markers (10), a sign with a map at the trailhead (6), interpretive signs (3), warning signs at the edge of the look-off (3), a directional sign at the fence at the beginning of the trail (1), more signs about garbage (1), a sign at the trailhead describing daily trail conditions (1), a sign at the trailhead describing the trail facilities (camping permitted, water sources, no washrooms) (1), a sign asking users to stay on the trail (1), and roadside signs to help trail users locate the trailhead (1). A couple respondents recommended a brochure be provided with interpretive information about the trail instead of using signage along the trail.

In the area of trail maintenance, respondents recommended installing a boardwalk to reduce erosion in wet areas (3), cutting branches and removing dead trees along the trail (2) and improving the secondary trail that goes down to the beach and joins back with the main trail (1). In the fall, a number of trail users noted that the trail was wet and muddy (6). One trail user suggested developing actual trails on the grassy headland at the end of the trail to decrease widespread trampling and erosion, while another one recommended prohibiting bicycles from the trail to prevent more erosion.

Suggested improvements to trail facilities included providing drinking water (1), washrooms at the trailhead (1), and some place to sit at the end of the trail (1). Three trail users recommended more serious development including a bridge across the split, a means of descending the crevices to the beach such as ropes, and a loop trail. One respondent in the fall was concerned that local residents may be concerned with the parking at the end of the road when there is heavy use.

Tiverton Balancing Rock Trail

Trail users suggested improvements in trail safety (12), trail facilities (5), interpretive signage (3), road signage (3), trail promotion (3), and trail maintenance (2). Trail users commented that the steep parts of the trail became slippery when wet. To make the trail safer, respondents recommended adding more steps, grip tape or shingles at the end of the trail to make the trail less slippery (4), using thicker rather than thin rope as railings (3), installing railings or ropes on both sides of the steps (2), replacing the wooden steps with metal steps (1), using a barrier along the steep parts that is more child-proof than netting (1), and trying to control erosion (1).

Respondents recommended providing more signs with interpretive information (1) about birds and animals (1), rarities (1), and the history of the balancing rock (1). One trail user suggested displaying a photo of the balancing rock at the trailhead or laminating a copy of a newspaper article that featured this rock formation. Trail users also recommended improving the road signage by installing bigger signs (1), placing a sign at the ferry waiting areas indicating the number of kilometres to the trailhead (1), and cutting back vegetation that had grown around one of the existing road signs (1).

Other suggested means of promoting the trail included advertising the trail better in the *Doers and Dreamers Guide to Nova Scotia* with a photo of the rock (1), providing trail brochures at the trailhead (1), and providing bus service to the trailhead (1). A number of respondents also commented during interviews that the distance markers along the trail were not accurate. One trail user recommended that more distance markers be added so people could better time their walks with the ferry schedule.

Suggested improvements to trail facilities included placing picnic tables at the end of the trail overlooking the balancing rock (2), providing more benches along the steep climb down to the rock (1), providing a drinking fountain (1), and improving the smell of the washroom facilities (1). Respondents also recommended cutting out roots from the trail (2) and reminding trail users to bring their garbage out of the trail (1).

Lunenburg Back Harbour Trail

Trail users suggested improvements in trail length (10), trail facilities (8), trail maintenance (3), promotion (3), and security (1). Many respondents recommended the trail be extended (10). Suggested improvements to trail facilities included providing washrooms (2), drinking water (2), garbage cans (3), and streetlights (1). In the area of trail maintenance, trail users recommended improving winter trail maintenance (1) and encouraging dog and cat owners to clean up after their pets (2). One trail user suggested prohibiting bikes on the trail. Three trail users recommended the trail be promoted more for tourists using road signs and an awareness program. One respondent was concerned about trail safety after dark.

Dartmouth Multi-Use Trail

Trail users suggested improvements in winter trail maintenance (8), parking lot safety and vandalism (6), general trail maintenance (6), trail facilities (6), multi-use designation (2), and brochures (3). Many respondents commented that it was not safe to leave their car in the parking lot because of vandalism. They recommended increasing security and having some kind of night patrol on weekends to control teenagers from damaging property.

Many trail users found the trails were icy and dangerous in the winter, and they recommended that more sand be used especially on the steep trails. Other suggested improvements to trail maintenance included removing overgrown roots (1), emptying garbage cans (1), and cleaning the washrooms. Trail users were also concerned about pet owners cleaning up dog droppings (3). Two respondents noted that the trail looked too much like a road and preferred it to look more natural.

Suggested improvements to trail facilities included providing more parking at the MicMac Mall entrance and along Highway 118 (2), providing more benches (2) and picnic areas (2), removing the motorized paddleboat from the park (2), and opening the washrooms in the winter (1). Two respondents recommended providing a trail brochure with a map of all the trails. One trail users recommended increasing bicycle signage, while another wanted there to be a part of the trail where dogs could be off the leash for part of the day.

Kejimkujik Seaside Adjunct Trail

Trail users suggested improvements in signage (23), trail facilities (10), over-development (7), trail maintenance (5), multi-use designation (2), and the brochure map (3). The type of signage recommended included signs on the highway providing directions to the trailhead (7), interpretive signs at the beach and at the trailhead on birds, frogs, seals, animal tracks and plants, etc. (7), distance markers at the beginning of the trail and maybe at the halfway point (5), directional markers, especially at the beginning of the trail and at the beach (3), a sign at the trailhead about the beach closure (1), signs indicating that the boardwalks are slippery when wet (1), a danger sign on the rocks (1), and a sign indicating that there is no drinking water or other services available on the trail (3). One respondent noted that the *Doers and Dreamers Guide to Nova Scotia* should indicate which services are available along the trail.

Trail users were worried that the trail might become too developed or commercialized (6), and some respondents noted that it was already too developed and crowded (2). In the area of trail maintenance, respondents recommended improving the trail surface (3) either by smoothing out the gravel or using wood chips, and fixing the boardwalk (2) so it is stronger and less of a hazard to dogs. One respondent thought that bikes should be permitted, while another one objected to the use of ATVs on the trail. Trail users also suggested improving the map in the park brochure (2). Suggested improvements to trail facilities included providing benches or picnic tables at viewing areas and rest spots (6), providing a garbage can at the end of the trail (1), introducing a check-in/check-out system (1), and making some other trail loops (1).

3. Factors Influencing Trail Use

Respondents in Question 25 were asked which factors would influence their trail use. The respondents reported that each of the nine factors would increase their trail usage. The highest percentage of respondents reported that they would use Nova Scotia trails more if more information on specific trails were available in guide books and brochures (68%), if there were more signs along the road identifying the exact location of trails (61%), if more day use trails were constructed in Nova Scotia (59%), if trails offered more ocean views (57%), and if trails offered more scenic viewing areas (53%). The remaining four factors were found to motivate between 29% to 49% of the respondents to increase their trail use. That is, fewer respondents reported that their trail use would increase if more interpretive information was added to trails (49%), if more wilderness trails were constructed (36%), if more rest spots and picnic areas were added (35%), and if existing trails were upgraded or improved (29%).

Fewer tourist trail users reported that they would use trails more if these 9 factors were implemented. The factors which were reported to motivate tourist trail users to increase their usage the most were more information on specific trails (61%), more day use trails (55%), and more ocean views (55%). More urban trail users noted that they would use trails more if there were more scenic viewing areas (67%), if there were more ocean views (65%), if more interpretive information was available (61%), if there were more rest spots and picnic areas (60%), if more wilderness trails were constructed (58%), and if trails were upgraded and improved (57%). More hiking/walking trail users reported that they would use trails more if there were more signs along the road for trails (78%), if more information on specific trails was provided (75%), and if more day use trails were constructed (71%).

A small number of respondents reported that some of these factors would make them use Nova Scotia trails less. The highest percentage of respondents reported that they would use Nova Scotia trails less if more overnight wilderness trails were constructed in Nova Scotia (3%), if trails offered more rest spots and picnic areas (2%), and if existing trails were upgraded and improved (2%). Generally, more hiking/walking trail users reported that these factors would make them use trails less.

The percentage of respondents who did not have opinions for each factor ranged between 8% and 23%, which suggests that some respondents would not change their trail usage if these factors were implemented. The highest percentage of respondents had no opinion about the overnight wilderness trails because they do not use these kinds of trails, as shown in Question 4. Generally, urban trail users reported more "no opinions", while hiking/walking trail users reported fewer "no opinions". Tourist trail users reported a higher percentage of "no opinions" with respect to constructing more wilderness trails, upgrading and improving trails, and constructing more day use and wilderness trails.

4. Other Improvements Recommended for Other Nova Scotia Trails

Respondents were asked in Question 26 to list any other improvements, additional services or changes they would like to see offered on other Nova Scotia trails that would increase their usage of these trails. The number of comments are indicated in brackets. A complete list of comments provided by respondents to this question is included in Appendix H (pages H-12 to H-15).

Respondents suggested improvements to approximately 40 different trails in Nova Scotia. Fifteen suggestions were made to improve the study trails, 7 of which concerned Cape Split. Seventeen recommendations were made to improve trails in Cape Breton Highland, and 8 different trails in this park were mentioned. These recommendations were directed at signage, maintenance, and interpretation.

There were 9 requests for more trails and preferences were made specifically for longer trails, shorter trails for children, trails that were loops rather than linear, trails that could be used for wilderness camping , and trails that were open in the winter. One trail user wanted work on the TransCanada Trail through Nova Scotia to be given priority. Three respondents recommended that existing trails not be further developed as they preferred wilderness and rugged, natural trails. Other trail users wanted more trail maintenance done, noting that trails were rough and difficult. ATVs and bicycles were blamed for some erosion and wear on trails. A trail grading system indicating the level of trail difficulty, suggested by one respondent, is one way that all trail users could find a trail suited to their abilities and preferences.

Trail users suggested improvements in signage (27), maintenance (21), trail facilities (16), trail information (13), interpretation (10), and promotion (3). Most of the signage recommendations were to add more directional and distance signs and general trail markers. Suggested improvements to trail facilities included providing washrooms (5), drinking water (3), rest spots (3), swimming places (2), lights for evening walks (1), and a rollerblade park (1).

Trail users noted that there was a general lack of information on trails. In particular, they wanted more information about trails and their locations, the level of difficulty of trails, and rail-trails. Some respondents noted that they had trouble finding a particular trail and in a few cases they never did find the trail they sought. Respondents also requested more descriptive interpretive information. To promote Nova Scotia trails, trail users recommended including more trail information in the Nova Scotia Tourism information package and in the *Doers and Dreamers Guide to Nova Scotia*, and advertising in magazines such as the *Yankee Magazine*. One respondent noted that local communities should have more information available on trails in their area.

5. Experience with Other Types of Trail Users

Respondents in Question 27 were asked to recount any experiences they had with other types of users on trails in Nova Scotia. The number of comments is indicated in brackets. A complete list of comments provided by respondents to this question is found in Appendix H (pages H-16 to H-21).

Types of Trail Users

Trail users described experiences with 10 different types of users including bicycles (61), ATVs (35), motorized vehicles (28), dog walkers (19), snowmobiles (7), cross-country skiers (4), horse riders (3), jet skis (2), joggers (1), and smokers (1). Some respondents did not have actual encounters with the types of users they described, but instead gave hypothetical answers about perceived conflicts between different kinds of trail users.

Bicycles

Of the 61 comments about bicycles, 31 were negative, 17 were neutral and 13 were positive. Respondents complained that bicycles were too quiet and could sneak up behind them and scare them. To prevent this problem, trail users recommended that cyclists use bells to warn people that they are approaching them (9). Some respondents thought that cyclists (especially children) rode too quickly past them, while others found the trails were not wide enough to accommodate walkers and cyclists. On the positive side, some trail users found that cyclists were polite and slowed down when they approached other types of users. One cyclist reported that he or she liked being able to bike on the same trails as hikers.

Motorized Vehicles

The comments provided about ATVs, snowmobiles, and motorized vehicles were almost all negative. The only neutral comments were made by two trail users in Cape Split in the fall who noted that an ATV had passed them slowly and presented no problem. Other respondents complained that these vehicles wrecked trails, disturbed the atmosphere of trails, disturbed wildlife, and were dangerous because of their speed. Two respondents recounted actual negative experiences whereby one trail user was nearly run over by an ATV and then splashed by it, and the other respondent was hit by an ATV once. Many trail users simply said they did not like any of these motorized vehicles and recommended that they use trails specifically set aside just for them. Jet skis used near trails were also found to detract from the solitude of the trail environment.

Dogs

Most of the comments about dogs concerned whether or not they were on leashes. Most respondents thought that dogs should be kept on leashes. One trail user noted that the requirement for leashes was necessary to prevent dogs from jumping on people and chasing wildlife. Three respondents found dog droppings to be a problem on trails, and one trail user recommended providing plastic bags for dog walkers at the beginning of trails.

Other Trail Users

Two trail users complained that horses tear up the trail, while another characterized smokers as another type of trail user. Other respondents noted that joggers and cross-country skiers posed no problems. One trail user felt that cross-country skiers should have part of the trail in the winter designated for their use so walkers don't wreck their tracks.

Multi-Use Trail Issues

Some of the issues raised by respondents were safety (12), erosion and damage to the trails (13), and right-of-ways (2). Some respondents stated that they were simply opposed to the idea of multi-use trails (4). A number of respondents felt that trails should be set aside for hikers and walkers only. Although Question 28 deals more with the management of multi-use trails, a number of trail users noted the need for separate trails for different kinds of users (15). Some respondents felt that motorized vehicles should have their own trails, while other trail users did not specify which type of trail users should have specially designated trails.

6. Opinions on Multi-Use Trail Use

Respondents were asked in Question 29 to indicate whether they agreed or disagreed with six statements concerning multi-use trails.

A. Motorized off-road vehicles and trail users on foot should share the same trail.

Approximately 84% of the respondents felt that motorized off-road vehicles and trail users on foot should not share the same trail, and 76% of the respondents noted that they strongly disagreed with the above statement. The respondents reacted the most cohesively and vehemently to this statement, suggesting they did not want to share Nova Scotia trails with motorized off-road vehicles.

B. More trails in Nova Scotia should be designated for hikers and walkers only.

Approximately 64% of the respondents agreed that more trails in Nova Scotia should be designated for hikers and walkers only, but some trail users (24%) had no opinion. Less than 8% of the trail users (7%) disagreed with this statement. More urban trail users agreed with this statement than other trail users.

C. More trails in Nova Scotia should be available for use by motorized off-road vehicles.

The respondents were divided over this statement. More than a third of the respondents had no opinion, while the remaining trail users were split with 35% disagreeing and 27% agreeing with the statement. Respondents may have found this question ambiguous as it does not clearly indicate whether the trails available for use by motorized off-road vehicles would be designated strictly for their use or for other uses as well. Urban trail users agreed more with this statement than other trail users.

D. More trails in Nova Scotia should be available for horse riders.

More than half of the respondents (53%) had no opinion about this statement. Many respondents commented that they did not know what kind of trail opportunities existed for horse riders in Nova Scotia. Almost a third of the respondents (33%) agreed that more trails should be available for horse riders, while only 9% disagreed.

E. I avoid trails with motorized off-road vehicles.

Consistent with the strong view shown in Question 29a, 75% of the respondents agreed that they avoid trails with motorized off-road vehicles, and 65% of the respondents strongly agreed with this statement. Another 12% of the trail users disagreed.

F. I avoid trails with bicycles.

Respondents were unequally divided over this statement. Approximately 50% of the trail users disagreed with this statement, while another 31% of the respondents agreed with it. Clearly, many more respondents were willing to share trails with bikes compared to the number of respondents that were willing to share trails with motorized off-road vehicles. Urban trail users disagreed more with this statement than other trail users, meaning they did not avoid trails with bicycles.

7. Managing Trails to Accommodate All Types of Users

Respondents in Question 28 were asked for suggestions on how to manage trails to accommodate all types of users. A complete list of comments provided by respondents to this question is included in Appendix H (pages H-22 to H-32).

Separate Trails

The most frequently mentioned recommendation made by trail users was to have separate trails for different types of users. Only one respondent mentioned that separate trails would be expensive. Respondents recommended having separate trails for motorized vehicles (such as ATVs, snowmobiles, and jet skis), bikes, and horses. Most trail users recommended that motorized vehicles use separate trails. They found that motorized vehicles were loud, dusty, and full of fumes. These vehicles were also thought to dig up the trail, scare off wildlife, and pose a danger to other trail users. One respondent suggested that trail users who damage a trail should be responsible for the maintenance required to fix it. A number of respondents recommended that people use these kinds of motorized vehicles on their own land. One trail user suggested adding blocks or barriers to prevent motorized vehicles from entering trails where they are not permitted, while another respondent recommended introducing a buffer zone around trails to keep ATV noise out.

Many respondents also recommended that cyclists use separate trails because they ruined the trail, went too fast, and approached walkers too quietly scaring them. Cyclists were thought to pose more of a problem on hilly, winding trails that have poor visibility of the trail ahead. Some other trail users did not mind sharing trails with cyclists if they used a bell or horn to warn walkers that they are approaching, if the trail was wide, and if the cyclists used moderate speeds.

Many respondents specifically recommended that trails be designated for walking and hiking only. A few respondents recommended that horse riders be restricted to separate paths because they can ruin trails. Jet skis, according to one trail user, also should not be allowed near trails. One respondent noted that snowmobiles specifically had to be kept separate from cross-country skiers. A couple of trail users noted that cross-country skiers could share trails with other users, but that walkers tended to walk in their tracks ruining them. These respondents recommended signage be used to designate part of the trail for cross-country skiers. One trail user recommended that wheelchair accessibility be improved, while another one suggested that hikers generally prefer trails that are too difficult for wheelchairs to negotiate.

Dogs

A number of trail users noted that dogs were fine on the trails if they were kept on their leashes. These respondents recommended that this leash requirement be better enforced by some kind of trail patrol capable of issuing fines. One respondent felt that dogs did not need to be on a leash if they were under their owners' control, while another recommended setting an area aside where dogs could run off the leash.

Sharing Trails

Some respondents suggested that different types of trail users could share the same trail if they were allocated either different times or parts of the trail for their separate use. Allocating certain times of day or days of the week for certain users was suggested by a few respondents. For example, cyclists could be allowed on a trail during certain hours of the day or they could be permitted one day per week on the trail. This would reduce the mix of users on the trail at the same time, but still allow the trail to be used by more users.

A couple of trail users recommended dividing trails for designated uses. One lane could be used by hikers and another lane could be designated for walkers. If the trail was not wide enough to permit this traffic, respondents recommended having parallel loops for hikers and cyclists. Another suggestion made was to open up the first part of a trail (for example, the first couple kilometres) to different users, and beyond that distance permit hikers only. Parts of the trail that are more suitable for multi-use (i.e., wide, flat, and straight) could also be designated multi-use portions of the trail. This type of trail user division was recommended for busier trails that are prone to congestion.

Users could also be required to travel in designated directions on a trail. All trail users could be required to travel in the same direction to avoid meeting other trail users coming from opposite directions. This one way direction may be appropriate for trails permitting motor vehicle use. On trails permitting walkers and bikers only, respondents suggested that different users be designated different directions of travel. This would prevent faster cyclists from sneaking up behind slower hikers.

Signage

Signage was mentioned by many respondents as an important means of managing multi-use trail use. They noted that better signs were needed at trailheads to make users aware of the different types of users permitted on the trail. If some users are only permitted at certain times or on certain parts of the trail, or if the trail required users to travel in a certain direction, this information would also have to be clearly posted at the beginning of the trail. Signage showing maximum speeds or defining the right of way of different trail users were recommended by some trail users to assist in the integration of different kinds of trail users. Respondents also recommended using signage or covering up side trails to prevent wheeled users from causing damage to the wilderness surrounding trails.

Trail Etiquette

Trail users who agreed that different types of users should share the same trail thought that education, courtesy, respect and common sense were what was needed to avoid conflicts. Rules and trail etiquette might have to be made explicit to some trail users such as cyclists. Signage advising trail users to keep to the right, for example, was recommended. One respondent recommended that trail users use the term "track" to warn other users to give the trail up to someone travelling faster behind them, but this practice common only in racing contexts would likely be construed as rude by other users and might encourage people not to slow down when they overtake other users on the trail.

Trail-Specific Considerations

Some respondents felt that multi-use designations of trails needed to be done on a trail-specific basis according to the terrain, surface, level of use, and other characteristics of each trail. Wider trails generally were found to support more types of users.

V. Economic Impact

Economic impacts result from the spending by trail users in Nova Scotia. In this report we first analyze the spending by the 556 trail users from the nine trails covered by the survey. Then we present estimates of the total population of trail users for the nine trails and use these to estimate aggregate and incremental spending associated with the study trails.

Trail Users by Origin

The 556 trail users break down into the following groups:

Table 9
Trail Users

User by Origin	Number	Percent
Non-Nova Scotians - Other Canada	122	22
Non-Nova Scotians - United States	161	29
Non-Nova Scotians - Other International	49	9
Nova Scotians - live within 30 minute drive of trail	119	21
Nova Scotians - live beyond 30 minute drive of trail	105	19
Total	556	100

- Percentage may not add up to 100 due to rounding.

Spending by Non-Nova Scotians and Nova Scotians

Average spending per party for Non-Nova Scotians is about $1,210. This breaks down to about $1,120 per party beyond a 30 minute drive of the trail and about $90 within a 30 minute drive of the trail. On average, Nova Scotian tourist parties[4] using the trails spend about $210 per party, of which about $130 occurs beyond the 30-minute drive range and about $80 within the 30-minute range. Nova Scotians who live within a 30-minute drive of the trail spend very little, about $2.50 per party on average. For these 556 trail users, Table 10 summarizes their overall spending. (See pages D-48 and D-51 in Appendix D for a breakdown of total spending into ten spending categories.)

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[4] Recall that these parties consist of Nova Scotia residents who travel more than 80 km or stay overnight as part of their visit to the trail where they were surveyed.

Table 10
Average and Total Spending by 556 Trail Users

	Average per User Party ($)	SE (%)^	Total Spending	# of Users	10% Truncated Average ($)
Non-Nova Scotians Spending beyond 30 Minute Drive*	1,123.6	5	$373,040	332	938.6
Non-Nova Scotians Spending within 30 Minute Drive	92.1	15	$30,580	332	31.6
Nova Scotians Spending beyond 30 minute drive**	127.2	24	$12,470	98	57.5
Nova Scotians Spending within 30 minute drive**	81.3	17	$7,970	98	48.6
Nova Scotians Spending, live within 30 minute drive^^	2.5	64	$300	121	0

Source: Nova Scotia 1998 Trail Survey.
Note: * Includes Other Canadians, United States and Other International.
** Includes only Nova Scotians who travelled more than 80 km or stayed overnight; i.e. those fitting the definition of a tourist.
^ Standard Error of the Mean as a percentage of the (not the Standard Deviation of the data distribution).
^^ Excludes respondents who stayed overnight.

One concern with the spending estimates is their precision. We have included the standard error measure to give a measure of the precision of each spending estimate. There are no fixed criteria for interpreting the standard errors. In a relative sense, it is the size of the standard error relative to the spending estimate that is important. So, for example, a standard error that is 5% of its associated spending estimate indicates a more precise measure than one that is 25%. The standard errors can be interpreted in the same way as the standard error of a regression coefficient: +/- two times the standard error defines a 95% confidence limit around the spending estimate. So, for example, suppose spending on accommodation is estimated at $5,000 with a standard error of $750. The 95% confidence interval thus runs from $3,500 to $6,500: in other words, this interval will contain the true expenditure value 19 times out of 20.

Estimated Population of Trail Users

Table 11 contains our estimates of total trail use by season for each of the nine study trails[5]. (See Appendix C for more details on how total trail use was estimated.) To allow for the variability inherent in the estimation method, the values shown should be interpreted as the mid-point of a range that extends plus and minus 15% about the mid-point.

The three tourist trails – Bog, Middlehead and Tiverton – show the highest use rates. This is perhaps not surprising as they are located on well travelled tourist routes, they are easily accessible, and are relatively short, easy walks. Cape Chignecto and Blomidon show the lowest use rates. Given that Cape Chignecto was a new trail this year and only open from late-June, one could expect that its rate of use will increase in subsequent years.

Table 11
Estimated Total Trail Use^ (User Parties)

	Summer	Fall	May*	June	Total
Urban Trails					
Dartmouth MU	8,400	2,000	1,200	1,700	13,300
Lunenburg BH	2,800	500	300	400	4,000
Tourist Trails					
Bog	20,500	5,200	3,100	4,400	33,200
Middle Head	10,500	3,000	1,800	2,600	17,900
Tiverton	12,600	1,400	800	1,200	16,000
Hiking/Walking Trails					
Keji Seaside Adjunct	5,100	1,000	600	900	7,600
Cape Split	5,600	900	600	800	7,900
Cape Chignecto	1,300	400	200	300	2,200
Blomidon	1,500	200	100	200	2,000

^ Total trail use is not calculated since the use estimates unavoidably contain an unknown amount of users who visited more than one trail.
Average party size is two persons (as is the median and the mode). So the total number of users is about twice the number of parties.

* May trail use was estimated at 70% of June use, based on the seasonal patterns of Nova Scotia tourism in recent years. June use was estimated by applying the fall average daily use.

** Note that Cape Chignecto only opened in late June; thus, these are hypothetical values based on the fall rate of use as explained in the previous note.

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[5] The estimates were developed from the usage counts made by the interviewers during the days they were on each trail. We developed average counts per hour and used these to create average usage per day based on the 12-15 survey days per trail, depending on the trail. Separate daily averages were constructed for the summer and fall seasons. The averages take into account weather variations. These were a very minor factor for the summer season but did play a key role in the fall season. We also made use of user count data provided by the Tiverton Board of Trade for the Tiverton Balancing Rock Trail. This count data covered the period July 5–August 28. For the Cape Chignecto Trail, we were able to compare data from the park voluntary guest book and estimates of attendance based on the park fee revenue collected with our own estimates.

Aggregate Spending by Trail Users

Aggregate spending by the population of trail users can be estimated by multiplying average spending per party by the total number of parties. Analysis of the spending data shows that Urban Trail Users do not make expenditures in connection with their trail use. (See page D-47 in Appendix D.) Thus, this group is excluded from these spending estimates. For the Tourist Trails and the Hiking/Walking Trails, the relevant average expenditure coefficients are shown in Table 12.

Table 12
Average Spending by Type of Trail and Proximity to Trail

	Hiking/Walking	Tourist
Beyond 30 minutes drive		
- Non-Nova Scotians	876.20	1,243.80
- Nova Scotians	97.70	191.10
Within 30 minutes drive		
- Non-Nova Scotians	102.00	78.80
- Nova Scotians	66.30	103.40

Aggregate expenditures associated with the use of the trails is estimated at about $90.5 million in Table 14, using the trail user populations shown in Table 11, the average expenditure coefficients shown in Table 12 and the distribution of trail users in Table 13. Non-Nova Scotians account for the bulk of the spending, about $86 million out of the $90.5 million total. Spending within a 30 minute drive of the trails accounts for about 8% ($7.2 million) of total spending, while spending beyond the 30 minute radius accounts for the rest, 92% or $83.3 million.

Table 13
Distribution of Trail Users by Type of Trail and Origin

	Hiking/Walking	Tourist
Nova Scotians	51%	14%
Non-Nova Scotians	49%	86%
Total	100%	100%

Table 14
Aggregate Spending by Type of Trail and Proximity to Trail ($000)

	Hiking/Walking	Tourist	Total
Beyond 30 minute drive			
Non-Nova Scotians	8,435.1	72,108.2	80,543.3
Nova Scotians	989.0	1,774.5	2,763.6
Sub Total	9,424.1	73,882.7	83,306.8
Within 30 minute drive			
Non-Nova Scotians	981.9	4,568.4	5,550.3
Nova Scotians	671.2	960.2	1,631.3
Sub Total	1,653.1	5,528.5	7,181.6
Total			
Non-Nova Scotians	9,417.0	76,676.6	86,093.6
Nova Scotians	1,660.2	2,734.7	4,394.9
Total	**11,077.2**	**79,411.2**	**90,488.5**

Incremental Spending by Trail Users

This refers to spending that occurs in Nova Scotia as a result of the trail system that would not have occurred otherwise. In other words, to what extent was the trail system a major influence on the decision to visit or travel in Nova Scotia? We also asked about whether the particular trail was a major influence to make the trip of which the hiking/walking experience was a part.

To explore this, survey respondents were asked use on a scale of 0-10 (where 0 = no influence, and 10 = single main reason) to rank both the influence of the trail system and the influence of the particular trail on which they were interviewed. Table 15 summarizes these results.

Generally, the trails either had a substantial influence or they had very little influence on the respondents travel plans. This is shown by the bi-modal distribution of the responses in Table 16: responders tend to be clumped at the top end and the bottom end of the distribution.

As might be expected, Nova Scotians are influenced more by the system of trails (mean score = 5.2) than are Non-Nova Scotians (mean score = 4.0). Nova Scotian's choice of destination is also more highly influenced by the particular trail where they were interviewed (mean score = 6.8) than are Non-Nova Scotians (mean score = 3.7).

In relation to spending by trail users, the mean value of the influence coefficients can be interpreted as the influence proportion: for example, a value of 0.5 is taken to mean that the trail system (or trail) was responsible for 50% of the aggregate spending by trail users. The other 50% is the regarded as being undertaken for other, unidentified reasons. This gives the means to adjust aggregate spending to identify the trail incremental portion.

Table 15
Influence of Trail System and Particular Trail on Travel Plans

	Mean	Standard Error	Count	Median
Nova Scotians				
Influence of system of hiking trails, All Trails	5.2	0.4	107	6
Influence of system of hiking trails, Urban	3	•	1	3
Influence of system of hiking trails, Hiking/Walking	6	0.5	71	7
Influence of system of hiking trails, Tourist	3.6	0.7	35	0
Influence of particular trail on choice of destination? (Q10), Total	6.8	0.4	107	9
Influence of particular trail on choice of destination? (Q10), Urban	10	•	1	10
Influence of particular trail on choice of destination? (Q10), Hiking/Walking	8.1	0.3	70	10
Influence of particular trail on choice of destination? (Q10), Tourist	4	0.7	36	1
	Mean	Standard Error	Count	Median
Non-Nova Scotians				
Influence of system of hiking trails, All Trails	4	0.2	331	5
Influence of system of hiking trails, Urban	3.5	2.1	4	3
Influence of system of hiking trails, Hiking/Walking	5	0.4	96	6
Influence of system of hiking trails, Tourist	3.6	0.2	231	3
Influence of particular trail on choice of destination? (Q10), Total	3.7	0.2	331	2
Influence of particular trail on choice of destination? (Q10), Urban	3.5	2.1	4	3
Influence of particular trail on choice of destination? (Q10), Hiking/Walking	6.3	0.3	96	7
Influence of particular trail on choice of destination? (Q10), Tourist	2.6	0.2	231	0

Table 16
Influence of Trail System and Particular Trail on Travel Plans

Influence	Nova Scotians*		Non-Nova Scotians	
	Trail System	Particular Trail	Trail System	Particular Trail
0	29	20	111	144
1	2	3	14	8
2	3	1	20	14
3	3	2	8	9
4	2	1	9	7
5	5	2	41	33
6	3	4	21	19
7	7	7	36	21
8	5	6	38	26
9	6	5	5	5
10	29	42	28	45
Total	94	93	331	331

* Inclusion criteria: Nova Scotians, live > 30 minutes from trail, travel more than 80 km from Trails Data Final.

Table 17 shows the results of adjusting trail related spending to take into account the influence of the trail system and the influence of the particular trail. Overall, the system of trails can be said to account for about 38% of aggregate spending by trail users ($34.2 million out of $90.5 million). If the influence of particular trails is used, the trail incremental portion of spending drops to about 31% ($28.3 million out of $90.5 million). It is interesting to note that the hiking/walking trails account for 16% to 25% of incremental spending, although they are responsible for only about 12% of aggregate spending by trail users.

Table 17
Adjusted Total Spending by Type of Trail ($000)

	Hiking/ Walking	Tourist	Total
Adjusted for Influence of System of Trails			
Non-Nova Scotians	4,708.5	27,603.6	32,312.1
Nova Scotians	996.1	984.5	1,980.6
Sub Total	5,704.6	28,588.0	34,292.7
Adjusted for Influence of Particular Trail			
Non-Nova Scotians	5,932.7	19,935.9	25,868.6
Nova Scotians	1,328.2	1,093.9	2,422.0
Sub Total	7,260.9	21,029.8	28,290.7

VI. Future Trail Development

1. Recommendations for Future Trail Development

Survey respondents were asked to recommend improvements for the study trails and other Nova Scotia trails, and to identify the factors that would increase their trail usage. Their answers to Questions 23, 24, 25, and 26 as well as other comments provided during interviews were used to identify recommendations for future trail development in Nova Scotia. Many of these suggestions are inexpensive to implement. Trail users interviewed indicated that some small, cost-effective changes would increase their usage of Nova Scotia trails. Only the recommendations pertaining to facilities and new trails would incur much spending. Volunteer assistance from community groups, trail associations, hiking clubs, and local users could also be used for some of the labour-intensive recommendations such as trail maintenance and upgrading improvements.

These recommendations are listed where possible in order of priority and cost effectiveness, but future trail development decisions must be made on a trail-by-trail basis. The trail-specific data from this study's surveys may assist trail managers in prioritizing the recommendations applicable to each trail. In all cases, the implementation of these recommendations will depend on available funding and community support.

Trail Information

- Provide more information about trails in brochures and signage (e.g., trail length and difficulty level, facilities available such as water and washrooms, multi-use designation).
- Provide detailed maps in trail brochures or on signs at trailheads.
- Provide more distance and direction markers on trails.

In Question 23, 24% of the respondents reported that there should be more trail information brochures. Another 68% of the trail users in Question 25 noted that they would use more Nova Scotia trails if more information was available on specific trails in guidebooks and brochures. A general lack of information on Nova Scotia trails was also identified in Questions 24 and 26. Respondents wanted more information on trails and their locations, their level of difficulty, facilities available, and their multi-use designation. Many trail users suggested there be better maps available either in brochures or on signs. They also wanted to see more accurate distance markers and more direction markers on many of the trails. In Question 23, 34% of the trail users also noted that there should be more distance and direction markers on trails.

Road Signage

- Improve road signage to assist trail users in finding trailheads.

Problems with road signage were identified on at least 7 of the study trails in Question 24. Motorists had trouble locating the trailhead because signage was either nonexistent, confusing, or overgrown with vegetation. In Question 23, 24% of the respondents noted that the trailheads for the study trails should be better identified on the road, while in Question 25, 60% of the respondents reported that they would use Nova Scotia trails more if there was signage on the road identifying the exact location of the trails. Only 9% of the respondents reported in Question 11 that they used road signage as a source of information for the study trails.

Interpretation

- Provide more interpretive information on trails in brochures.
- Provide more interpretive information on signs on trails.
- Provide more interpretive information specifically on trail features such as vegetation (flowers, orchids, trees, plants, mushrooms), wildlife (birds, animals, fish, animal tracks, seals, frogs), human history, geology, and other rarities.

In Question 23, 37% of the respondents reported that there should be more interpretive information available on the study trails. The trail users on all of the hiking/walking trails and tourist trails also suggested more interpretive information was needed in Question 24. More interpretive information was also requested on other Nova Scotia trails in Question 26. Furthermore, 49% of the respondents in Question 25 indicated that they would use Nova Scotia trails more if there were more interpretive information on trails.

Trail Maintenance and Upgrading

- Remove dead trees and brush, tree roots and litter from trails.
- Address specific trail maintenance problems such as coin throwing on the Bog Trail, slippery steps on the Tiverton Trail, and winter trail maintenance and vandalism on the Dartmouth Multi-Use Trail.

- Fix structures such as steps and railings that require maintenance.
- Improve wet, eroded sections of trails using boardwalks, drainage works or surfacing materials such as gravel or wood chips.
- Provide more ocean views and scenic views on trails.

While only 9% of the respondents thought there should be more trail maintenance on the study trails, there were recommendations to improve maintenance on all of the study trails in Question 24, and many of the recommendations for other Nova Scotia trails in Question 26 addressed this issue. Another 29% of the respondents (including 57% of the urban trail users) indicated in Question 25 that they would use Nova Scotia trails more if existing trails were upgraded and improved. Trail users in Question 25 also noted that they would use Nova Scotia trails more if there were more ocean views (57%) and more scenic views (53%). This could be done inexpensively on some trails by simply clearing more trees and vegetation from areas with views or constructing short side trails from the main trail at strategic spots.

Trail Promotion

- Provide Visitor Information Centres with more information on trails, and include more trail information in the Nova Scotia Tourism information package sent to tourists.
- Provide more information about trails in the *Doers and Dreamers Guide to Nova Scotia*.
- Advertise Nova Scotia trails in magazines.
- Involve local communities in trail promotion.

Trail promotion was addressed indirectly already through road signage and trail brochures. Respondents noted the need for more advertising and marketing of the study trails in Question 24 and of other Nova Scotia trails in Question 26. Only 14% of the respondents reported using Visitor Information Centres as a source of information for the study trails. More than half of the trail users interviewed relied on word of mouth and general knowledge to find out about the study trails.

Multi-Use Management

- Develop a policy regarding the use of motorized vehicles on trails.
- Consider the trail terrain, width, surface, level of use and other characteristics when deciding to permit bicyclists on trails, and review these considerations periodically.
- Provide signs at the trailhead warning trail users of other types of trail users on the trail and reminding trail users such as bicyclists to slow down when passing other trail users.
- Require dogs to be on a leash, and use signs to encourage owners to pick up after their dogs.

Respondents in Questions 27 to 29 indicated their concerns about the designation of multi-use trails. Trail users were strongly opposed to sharing trails with motorized vehicles in all three questions. Since the trail users interviewed were all on trails where motorized vehicles were prohibited, their views may be biased on this issue. A policy for motorized vehicles should be developed to deal with trails where such use may be appropriate. Their views towards bicyclists were much more mixed, but respondents provided many recommendations to assist in their integration with other trail users. Innovative suggestions to have cyclists time-share trails or use only parts of trails are not recommended because of the problems of administration and enforcement they introduce. Respondents also voiced their concerns about dogs in the general improvement questions for the study trails and for other Nova Scotia trails in Questions 24 and 26.

Crowding and Over-development

- Reduce overcrowding on overnight wilderness trails on the weekends by specifically marketing wilderness experiences on weekdays.
- Construct shorter day use trails in the area around existing wilderness trails to take up some of the overloading on these trails at peak times.
- Do not add new facilities and upgrade existing trails without addressing trail users' concerns of over-development.

The issue of over-development was raised in comments in Questions 24 and 26. Respondents were particularly concerned about over-development on the Cape Split and Keji Seaside Adjunct trails. In Question 25, some hiking/walking trail users indicated that they would use Nova Scotia trails less if they were upgraded and improved, and if there were more rest spots and picnic areas. Staff at Cape Chignecto

Provincial Park were also concerned with overcrowding and were planning to implement the first two recommendation listed above.

Facilities

- Provide information on signs about where trail users can find drinking water and washrooms in the local area.
- Provide more benches and picnic tables at rest spots and viewing areas.
- Provide more garbage cans on trails at the trailhead, and at the end of trails if it is not too difficult to maintain.
- Provide drinking water at the trailhead of trails where there is a great demand for it and if it is economically feasible to install and maintain.
- Provide washrooms at the trailhead and possibly at the end of trails where there is great demand for them and if it is economically feasible to install and maintain.

Respondents in Question 23 recommended there be more drinking water (29%), washrooms (22%), garbage cans (20%), and rest spots and picnic areas (13%). These facilities were also suggested for the study trails in Question 24 and for other Nova Scotia trails in Question 26. Drinking water and washrooms were requested more by trail users on urban trails, and may be more appropriate to these developed areas. Where it is not feasible or desirable to install washrooms and drinking water, trail users will appreciate knowing where the closest facilities are, and whether it is necessary to bring in their own water.

New Trails

- Construct linking trails to existing trails to make them into loops where possible where these new trail links will enhance the existing trail by including new features (such as views or different habitats).
- Construct more day use and more overnight wilderness trails of different lengths and degrees of difficulty.
- Design trails to be loops rather than linear paths.
- Design new trails to have ocean news and scenic views.

Respondents in Question 26 reported that they wanted to see more trails of various lengths. A number of trail users using study trails that were linear recommended that they be made into loops in Question 24. As discussed already, respondents in

Question 25 indicated that they would use trails more if trails had more ocean and scenic views. In Question 25, respondents indicated that they would use Nova Scotia trails more if there were more day use trails (59%) or more overnight wilderness trails (36%). Although this suggests a greater demand for day use trails, the fact that there are so few wilderness trails available in Nova Scotia compared to day use trails may warrant the addition of more wilderness trails. Furthermore, many of the trail users interviewed were seeking a wilderness experience from their visit, and more than a third of the hiking/walking trail users and more than a quarter of the tourist trail users reported that they do backpacking trips. Constructing new overnight wilderness trails would allow the province to promote itself as a wilderness backpacking destination to residents and tourists.

Appendix A

Background Information and Methodology Issues

1. Other Trail Users and Economic Impact Surveys

Trail user surveys have been conducted in a number of other studies. In drafting the survey instrument for this study, we reviewed other trail use surveys completed in Canada and the U.S., selected Canadian national park surveys, and some economic impact surveys completed in Nova Scotia. We drew heavily from the trail user survey from the Comprehensive Economic Impact & User Study of the Bruce Trail (1997) because it was a recent Canadian survey that sought the same kind of information we did. In the Bruce Trail study, 112 user interviews were conducted between July and August 1994 at 34 site locations along the Bruce Trail throughout the week and weekends. Initially, a goal of 250 surveys was set, but fewer surveys were completed than expected because the length of time to complete each survey (approximately 15 minutes) dissuaded some groups from participating. Furthermore, the researchers could only conduct one interview at a time when they approached a group on the trail, and some survey days they met few groups. Overall, the response rate for groups approached on the trail was quite high (about 90%).

The survey instrument used in the Bruce Trail study was much shorter than our survey, consisting of 34 questions in three pages. It was divided into 4 sections including user background information, trail use, economic impact, and satisfaction/attitudes. The survey only attempted to measure the incrementality of the economic impact of the trail in general terms (i.e. it asked if visiting the Bruce Trail was one of the reasons for visiting the area or the primary reason), and it did not ask many questions about trail users' satisfaction with trail components or factors that would increase trail user's trail usage. The questions were also more narrowly focused because they related to just one long distance trail rather than a whole trail system as in our study.

We also reviewed several U.S. trail user surveys including the Economic Impact of Ghost Town Trail Study (1996), the National Park Service's Impacts of Rail-Trails Study (1992), The Economic Impacts and Uses of Long-Distance Trails: A Case Study of the Overmountain Victory National Historic Trail (1998), and the Analysis of Economic Impacts of the Northern Central Rail Trail (1994).

In the Ghost Town Trail study, a total of 232 user surveys were completed over 18 sample days between May and July of 1996. The survey instrument had 15 questions and requested information on users' demographics, trail use, and users' expenditures. The incrementality issue was generally addressed by asking trail users if visiting the site was the primary reason for their trip, or one of several reasons for the trip, where the number of reasons were specified. The focus of this survey was a detailed question about regional expenses associated with one specific multi-use trail.

The National Park Service's Impacts of Rail-Trails study conducted between March 1990 and February 1991 examined the economic benefits of three rails-trails using on-site and follow-up mail surveys (1,705 mail surveys). The focus of the survey used was also on trip expenditures and other expenditures on durable goods. The mail survey response rate ranged between 71 and 89% for all three sites. Questions on trail users perceptions were limited to the most important trail characteristics, trail characteristics perceived as problems, and the highest trail benefits perceived by trail users.

The National Park Service also used brief on-site questionnaires and mail-in surveys in the Case Study of the Overmountain Victory National Historic Trail completed in March of 1998. The trail in this case consisted of 300 miles of motor route, a series of historic sites and visitor centres and several off-road trail segments. The on-site questionnaire consisted of 6 questions about the trail users' visit to the site, while the mail-in survey consisted of 30 questions that asked for details on trail users' satisfaction with the site, motivation for visiting this site and other sites, trip expenditures, past use of the trail, and demographics. A sample of 2,815 users were contacted in the study, and the response rate for the mail-in survey was 63%.

In the Northern Central Rail Trail study completed in June of 1994, 1,266 user surveys were distributed directly on the trail or via intercepts at parking facilities located along the trail and 199 were received which represented a 16% response rate. The surveys used in this study consisted of 26 questions relating to trail usage, satisfaction with various trail components, the intrinsic value of the trail, and demographics. Respondents were also asked generally whether they would like to see more trails developed in the state. Separate survey interviews with trail users were used to provide information for the economic impacts analysis. Figures provided by these interviews were used to assess both the direct, indirect and induced economic impacts of purchases directly attributable to the trail. Respondents were asked to estimate their per person expenditures over the past year for hard goods that the use of the trail influenced them to purchase, and to estimate their expenditures per trip for soft goods.

The Northern Central Rail Trail study also included a review of similar trail user studies completed in Wisconsin, Minnesota, and Illinois that examined the impact and benefits of trails. The focus of these studies was on describing trail usage and comparing average spending of tourists and local trail users. The Illinois Statewide Trail User Study (1990) completed by the U.S. Forest Service, however, also documented another measure of trail value by asking respondents if they would be willing to pay a yearly fee to help maintain the study trail and develop new trails.

We also reviewed selected Canadian National Park surveys (Terra Nova National Park 1990 Visitor Profile Survey, Prince Edward Island National Park 1987 Visitor Survey, the survey from the 1987 Visitor Study: Backcountry Use in Gros Morne National Park, and the questionnaire from Pukaskwa National Parks' Exploratory Study used to determine the levels of use, needs and expectations of backcountry users). We used these surveys mostly to draft questions about trail users' hiking experience, activities on trails, and perceptions and observations of trails.

In general, all of the trail user surveys that we reviewed were shorter in length than our final survey instrument. None of the studies attempted to collect the breadth of information that we sought in our user interviews. These studies were narrower in focus and did not ask respondents about their use of other trails or factors that would affect their usage of the study trail or other trails. The economic impact studies tended to focus on expenditures and trail usage only, while the national park surveys were more interested in visitor profiles and user satisfaction with parks. The survey used in the Bruce Trail study and the Northern Central Rail Trail were the two most comprehensive surveys reviewed. Aside from asking respondents about their opinions on other trails, these surveys attempted to cover many of the areas our survey sought to address.

In drafting our survey, we also adopted with some modifications some of the economic impact questions from the Tourism Nova Scotia's 1996 Visitor Exit Survey, and the exit questionnaire from the *Renoir Portraits Economic Impact Study* (1997). We adopted some of the expenditure questions directly from the N.S. Visitor Exit Survey to be able to use the N.S. Tourism Economic Impact Model in our analysis. This involved using the same expenditure categories and the same definition of a tourist.

Other questions were modified from the Renoir Study to address the incremental impact assessment of N.S.'s system of hiking trails and the study trails in particular. While other economic impact studies we reviewed asked respondents if the study trail was the primary reason for visiting the area or one of several reasons for visiting the area, we preferred using the Renoir study's approach which used an 11 point scale to measure the influence the study trail and N.S.'s trail system had on respondents' decisions to visit the area and the province, respectively. This allowed us to more accurately assign the incremental benefits of trails in our economic impact analysis.

While many of the economic impact studies reviewed used mail-in surveys, we chose to use on-site user interviews because we wanted fresh opinions on trail components, and we expected a very low response rate if surveys were distributed on-site to vacationers who would have to wait to return home to mail their surveys back. We also rejected the option of mailing surveys to the homes of trail users after they returned from their vacations because of the expected delays, the recall and memory bias, the expected low response rate, and the expense involved. We also expected that trail users might be reluctant to provide us with their name and address, and this was confirmed by the refusal of many respondents in the on-site user interview to provide this information.

The major disadvantage of conducting user interviews was that respondents had to estimate their trip expenditures while they were in mid-trip, rather than to recall actual expenditures made. This was more of a problem with first time visitors to an area, respondents who were just beginning their trips, and respondents who were on long vacations.

2. The Economic Impact of Other Trails

Many studies have found that the economic and other benefits of trails are substantial. The National Park Service in 1995 in its review of economic impacts of protecting rivers, trails and greenway corridors organized economic impacts into the following categories:

- real property values;
- expenditures by residents;
- commercial uses (e.g., concessions, permitees, special events, filming and advertising);
- agency expenditures;
- tourism;

- corporate relocation and retention;
- public cost reduction (e.g., hazard mitigation, pollution control, reduction of health care costs etc.).

These economic effects have been found to be significant sometimes measuring in the tens or even hundreds of millions of dollars. In the Overmountain Victory National Historic Trail Case study (1998) completed for the U.S. National Park Service, 28 economic impact studies of trails and trail activities conducted between 1986 and 1995 were reviewed. The findings of these studies typically included average daily expenditures, annual durable goods expenditures for trail-related equipment, or total economic impacts. A few studies also measured the number of jobs supported or created by trails, estimated tax revenue, and gross added sales from businesses. Past research has identified other types of economic benefits including increased nearby property values, corporate relocations, reduced health costs and others.

The economic impact generated by visitors while travelling to and from recreational trails and from participating in recreation activities on them was found in many studies to be an extremely important benefit of trails. Many of the studies found the average daily expenditures of trail users varied between residents and non-residents, or between the state of residence of trail users. Factors such as length of stay, distance travelled to get to a trail, type of accommodation used, and trail activity affected user expenditures. Some of the findings of these studies are listed below:

- In the U.S. National Park Service's study of three rail-trails in 1992, trail users spent an average of $9.21, $11.02, and $3.97 per day on their visits to the Heritage (26 miles), St. Marks (16 miles), and Lafayette/Moraga (7.6 miles) trails, respectively. The trail expenditures and the latter trail was due principally due to the fact that this trail was used mainly for short trips by local residents, whereas the other two trails attracted more users from beyond their local neighbourhoods.
- In a series of trail studies conducted in Minnesota by the Department of Natural Resources from 1988 to 1990, user expenditures ranged from an average of $.43 to $9.71 per person per day across the seven study trails. The average expenditures tended to be higher on trails where users travelled farther to get to the trail.
- In a study of the Sugar River Trail, a 23.5 mile bicycle trail in Wisconsin in 1996, trail users spent an average of $9.04 per person, and out-of-state users spent over twice as much as Wisconsin residents.

- In the Ghost Town Trail study in Indiana in 1996, average daily expenditures for trail users per day was $4.33 for residents and $9.28 for non-residents.
- In a study conducted by the Minnesota Department of Natural Resources using survey data from 6 rail-trails between 1980 and 1988, trip-related expenditures varied according to the trail visited, and how far users travelled to get to the trails. Trail users who travelled less than 25 miles to get to the trails spent an average of $.61 to $2.86 per day, depending on the trail visited, while those travelling from further away spent up to $53.20 per day on average.
- In a study of the economic impact of 19 Illinois bicycle trails conducted by the USDA Forest Service in 1990, average users reported spending $7.95 per person per trip but over half of the users reported having no expenses. When horseback riders were removed from the sample, the average expenditures dropped to $2.89 per person per trip.
- In a study in 1994 comparing different types of trail users in the Mount Rogers National Recreation Area in southwest Virginia; hikers, horseback riders and bicycle riders spent $39.24, $23.44, and $50.37 respectively per person per day.
- A number of studies including those conducted in Vermont, Ontario, and South Dakota found that snowmobile trails generate particularly high levels of economic impact due to the expenditures required for the purchase and operation of snowmobiles and the relatively high percentage of snowmobile users who use fixed roof accommodations rather than campgrounds.

Average expenditures were also measured in the local region and outside the region in some studies. For example, in the Bruce Trail study in Ontario, the average expenditures per group per trip was $45.38 in the local region (within 10 km of the trail) and $15.60 outside of the region.

Estimates of spending on durable goods related to trail use were also included in many studies. Respondents in the Bruce Trail study reported spending an average of $324.22 on clothing, equipment, books, and fees and other durable goods related to the trail in the past year. The U.S. National Park Service in its 1992 study of the economic impacts of rail-trails found that trail users spent an additional $132 to $250 each annually on durable goods, depending on the specific trail. Equipment such as bicycles was the largest category of durable good expenditures. In the North Central Rail Trail study in Maryland in 1993, 70% of trail users reported purchasing "hard" goods related to their trail use in the past year, and these included bicycles, supplies, clothing and film etc. Trail users and property owners in this study spent an average of $203 per person on goods for use on the trail. In our study, a question on durable goods was dropped from the final version of the survey because respondents consistently reported zero spending in this area when we pre-tested the survey instrument.

Additional economic impact studies have attempted to predict the likely economic impacts of proposed trails or trails under development using expenditure findings from previous trail economic impact studies. These studies relied on previous studies conducted on similar trails such as rail-trails or of trails in the vicinity. For example, Florida State University in 1994 relied on expenditure information from the U.S. National Park Service's 1992 study on the impacts of rail-trails to estimate the economic impact of reopening the Georgia, Florida and Alabama rail corridor as a multi-use recreational trail. The total annual economic impact for this proposed 52 mile trail was projected to be more than $3 million based on an estimate of 160,000 visits per year.

In forecasting the economic impacts of a proposed Katy-Missouri River Trail, researchers use two different techniques based on information from 3 previous studies of existing rail-trails. The average user sales per mile estimated from the other studies was multiplied by the total length of the proposed trail to estimate spending of $4 million for the trail, while an alternate prediction of $6.2 million in total estimated trail-related user sales was made by making assumptions about different compositions and levels of use on different sections of the proposed trail.

One researcher conducted case studies of two existing rail-trails (the Elroy-Sparta Trail in Wisconsin and the Youghiogheny River Trail in Southwestern Pennsylvania) to predict strategies to maximize the economic impact of the North Bend Trail, a 60.6 mile rail-trail still under development in West Virginia at the time of the study. Four factors were recommended to capitalize on the economic opportunities of rail-trails, and these included the following:

- marketing and promoting the trail (e.g., creating a niche, target marketing, and promotional materials);
- providing trail services such as trailheads, signage and businesses;
- developing additional attractions such as cultural events and festivals, side trails, and historical preservation;
- fostering community promotion through slogans, brochures and hospitality, etc.

Some of these suggestions for trail planning and development have emerged from other economic impact studies. The Ghost Town Trail study concluded that additional marketing and advertising was necessary to increase the visitation of nonresident trail users in order to increase the economic impacts for the local region. It also recommended the business community provide a more inviting entry for trail users at one entrance lacking trail amenities, to increase the volume of tourist trade. The Bruce Trail study found there was a need for tourism and economic development agencies and area municipalities along the trail to recognize the existing tourism importance of the trail and potential for new economic development related to trail use and users.

The United States Parks Service's study on trails provided information to assist in the planning, development and management of rail-trails. It also concluded that marketing efforts were necessary to attract out-of-town visitors and encourage them to make overnight stays. These studies also identified a dedicated core of users which managers of existing trails and planners of new trails could tap into as a volunteer base to assist in appropriate planning and management activities.

It was emphasized in the Overmountain Victory National Historic Trail Case Study that trail benefits should be reviewed as a package rather than presenting economic benefits in isolation. Some of the wide variety of benefits from trails and trail use identified in that study include the following:

- public recreation opportunities;
- tourism and economic development;
- health and fitness;
- aesthetic beauty;
- preserving undeveloped open space;
- community pride;
- access for disabled persons;
- public education about nature and the environment;
- traffic reduction;
- transportation alternatives.

That study cautioned trail planners and managers not to lose sight of these multiple benefits when documenting the economic benefits of trails. As trail users and the general public may not recognize the benefits of trails, trail proponents and trail managers should document the range of benefits trails provide and educate users and the public about their significance. This will allow the public and other decision-makers to make the best choices about trail development and management.

3. Survey Methodology

A survey methodology is comprised of three essential stages:

- describing and defining the population to be sampled;
- developing a statistical sampling procedure; and,
- designing a questionnaire.

The target population for this study is users of the ten trails in Nova Scotia covered by this study. Prior to the study little was known about the population in a statistical sense. Hence, our approach was to create a sampling framework that would capture a representative sample of trail users from each of the ten trails.

The sampling requirements for this study were met by using a combination surveying and observation approach:

- In-person interviews
- Infra-red counters
- Visual counting

Each of these approaches has its own strengths and limitations in terms of accuracy, statistical efficiency, coverage of the population, quality control and cost. The following discussion sets out our approach for each option and discusses the merits of each.

4. In-person Interviews

The interview schedule was designed to take account of variables such as:

- Time of day: we tried to do a mix of morning afternoon and early evening during the summer months (up to September 7) and morning and afternoon during September and October;

- Day of Week: We attempted to achieve a 60-40 weekend to weekday split;

- Time of Year (i.e. summer versus early fall): On the basis of 12 interviewing days per trail, we planned for seven days in the summer and five days in the fall. This was achieved except for those trails that were closed during the woods closure in August (Cape Split, Blomidon, Kejimkujik, and Cape Chignecto (which was not actually closed but most people thought that it was and attendance dropped to zero). For these trails, we have applied extra survey days during the fall to attain the target.

Sites for in-person interviews were carefully selected, either at an exit point or trail side, so that interviewees could provide a full assessment of their trail experience. When the selected party were approached, a 10-15 minute interview was requested of the adult in the party who has had the most recent birthday to eliminate group leader bias.

The interviewers were trained and supervised by senior Gardner Pinfold personnel. A training session was held on the Shubie Park trail system. In addition, a reconnaissance trip was made to all the trails prior to start of interviewing. The interviewers walked the trail and selected the optimal interview sites.

5. Measuring Trail Use

To accurately estimate the total economic impact of a trail, an accurate estimate of use is necessary. This is because at some point, an accurate estimate of average group expenditures must be multiplied by an estimate of the total number of users. Measuring use on trails is difficult and estimating use on trails with multiple access points and where users may pass the same point more than once during their outing is even more problematic.

Five kinds of estimates have traditionally been used to determine levels of use for parks and trails and these include:

- pure guess;
- observational estimates by administrators;
- growing (seldom retreating) statistic based on rough comparison from year to year;
- sampling procedure, either using direct counts of people or counts of a related phenomenon;
- pure count of some user data (Knudson, 1980, p. 399).

Techniques of measuring trail use which have been tried with varying levels of success in previous studies reviewed have included the following:

- a user count at samples of trailheads;
- unmanned voluntary trail registers;
- self-issued mandatory permits;
- mandatory permits; and,
- electric counters.

The authors of the Case Study of the Overmountain Victory National Historic Trail (1998) reviewed different trail counting methods employed in past studies and concluded that despite more than two decades of research on measuring trail use, effective and efficient methods are still lacking. In some economic impact studies of trail use such as the Case Study of the Overmountain Victory National Historic Trail, and the Northern Central Rail Trail study (1994), attendance information was available from park administrators or trail managers.

Sample counts made by personal observation have been used in a number of different studies to estimate trail use. The Minnesota Department of Natural Resources in the Munger State Trail study (1988) collected data by stationing observers at trail access points for two-hour periods to count and interview trail users. Fifty-eight "observation periods" were randomly chosen during the 16 week survey season to get sample counts at different times of the day, on different days, and at different access points. User counts were then averaged and multiplied by the number of two-hour blocks per day, the number of days per season, and the number of access points to calculate total use.

Two other commonly used methods of measuring trail use include voluntary trail registers and electronic counters. The Bruce Trail study (1997) used an unmanned voluntary registry system where users were invited to fill out registration cards at 34 registry site locations. These cards requested brief demographic information and the date of registering. To determine an estimate of total use, a response rate for the registry was calculated by having interviewers observe the percentage of users who filled out cards at the registry when they passed it on weekends and weekdays during the study period.

During the 12-month study period of the Bruce Trail study, two registries were destroyed at the beginning of the study, and three registries were destroyed in the second phase of the study. The registries also were not always operational due to running out of cards or pencils, or some of the cards being destroyed. The average response rate for the trail registries was 38%. The average response rates for earlier trail studies in Canada and the U.S. using registries that were reviewed in the Bruce Trail study varied widely ranging between 28% and 85%. We decided not to use a registry system because of the wide fluctuations of response rates found in previous studies, the work involved in maintaining each registry station, and the risks of vandalism at the remote trailheads.

Infrared counters are also commonly used in trail research. The U.S. National Forest Service, which has much experience in estimating trail use, has recommended active infra-red trail counters over seismic counters and passive infra-red units. Active infra-red trail counters were used in the Ghost Town Trail study to assess the volume of trail use during the 1996 summer season. Eight sample days of trail counter observations were completed at the most popular entry point to the trail system.

Approximately 22% of trail users on average were not counted by the infra-red device in the Ghost Town Trail Study because the beam would only be broken once when multiple trail users passed through it simultaneously (i.e. when trail users are walking two abreast or more, when trail users are walking too close behind each other, and when trail users travelling in different directions pass through the beam at the same time). A counter multiplier was estimated for each sampling day based on each day's percentage of undercounting to calculate the actual daily number of trail users. The calculation to determine total use also had to be adjusted by 33% to reflect the number of users entering the trail system from other access points, based on trail administrator's estimates. The researchers in the Ghost Town study encountered some problems with their counter readings including some malfunctioning days, and weeds that grew tall enough to be recorded as events by the counter.

In our study, we had to rely on sample counts made by personal observation and counts made by infra-red counters on selected trails. Unofficial trail counts based on personal observation by volunteers were also available for the Tiverton Trail for selected days during the study period. The staff at Cape Chignecto Provincial Park also allowed us to count the number of trail users who signed their guest book. Since signing this book was voluntary, it provided only a minimum number of trail users between June 26 and October 10, to compare with our data. We also were given monthly visitor counts for this trail from the Cumberland Regional Economic Development Agency.

6. Problems with the Beam Counters

Undercounting was expected from the infrared counters for two reasons. First, the counters are unable to count simultaneous crossings of their beams when trail users either walk beside each other, walk closely behind one another, or pass through the beam from opposite directions at the same time. Furthermore, the counters were not sensitive enough to record a short break in the beam from joggers or cyclists who would pass through it too quickly. A sensitivity of P3 was used which meant a break in the beam of at least 0.15 seconds was required for an event to be registered by the counters. This sensitivity setting was selected to attempt to count faster moving trail users, but not count small interferences in the beam from such things as rain or falling leaves.

Instead of the expected undercounting, the infrared beam counters more often recorded over-counting. This could be explained by four possible reasons, including:

- misalignment of the receiver and transmitter;
- movement of the receiver or transmitter;
- sunlight focused on the receiver;
- malfunctioning of the counter.

According to the instruction manual for the infrared beam counters, over-counting occurs more frequently from misalignment or movement of the receiver or transmitter, than from sunlight focused on the receiver. The setting up instructions describe how the receiver and transmitter should be lined up to avoid misalignment and movement problems. The beam should be focused in the middle rather than at just the edge of the beam. Trees too large to be blown around in the wind also should be selected for mounting the devices, and care must be taken to avoid branches or tall weeds in the way of the beam. It was sometimes difficult at our trail sites to select large enough trees for mounting the counter devices, and lining the receiver and transmitters up so their beams were centrally focused was not easy using natural trees that were not easily lined up.

Sunlight focused on the receiver can also cause the counters to register false events. However, this is most likely to occur in the early morning and early evening when the angle of the sun is lower. Since we did not find more over-counting at these two times of the day, we did not think this was the cause of over-counting in our case. Since both devices were found to over-count, we think this problem was due to misalignment and movement of the receivers and transmitters.

7. Problems with Visual Counting Samples

The surveyors who also did the visual counting of trail users were unable to survey and record much counting information at the same time on busy trails. While surveying, they kept track of the total number of trail users that entered or exited only. For one hour of each sampling day, they also recorded more detailed counting information such as the number of trail users entering the trail and exiting the trail, and the number of users who walked, biked, walked dogs, or stayed overnight on the trail.

The total counts recorded for the sampling period each day meant different things for each trail. For example, a total count of trail users on the Bog Trail or the Tiverton Trail for 6 hours would double-count many visitors because trail users took less than an hour to complete the walk and there was only one access point to enter and exit. In contrast, the total counts of trail users on the Cape Split Trail or the Keji Seaside Adjunct Trail would have fewer double-counts because trail users tended to spend a half day or whole day visiting them.

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Appendix B

Questionnaire

NOVA SCOTIA TRAIL USERS SURVEY

INTRODUCTION

Hello, my name is . We are conducting a survey of trail users for several provincial and federal government departments (Nova Scotia Department of Economic Development and Tourism, the Nova Scotia Sport and Recreation Commission, and Human Resources Development Canada) to assist in the development and planning of trails in the province. Would you be willing to help us by answering some questions about your trail experience? It will only take 15 minutes of your time and all information you provide will be kept confidential.

Interviewer:
If answer is "NO", respond: Thank you for your time and we hope you enjoyed the trail.
If answer is "YES", and the respondent is ALONE, proceed with the questionnaire.
If answer is "YES", and the respondent is NOT ALONE, ask: Which member of your group (who is 15 years old or more) you arrived with had the most recent birthday? **Proceed with the questionnaire with this person. Define "group" where necessary as people travelling together and sharing expenses.**

Interviewer: ______________________________

Survey #: ______________________________

Date (M/D): ______________________________

Time: ______________________________

Trail: **Mark the appropriate box.**

• Cape Split	☐	1	• Blomidon Provincial Park	☐	2
• Dartmouth Urban Trail	☐	3	• Lunenburg Back Harbour Trail	☐	4
• Guysborough Rail Trail	☐	5	• Tiverton Balancing Rock Trail	☐	6
• Kejimkujik Seaside Adjunct	☐	7	• Cape Chignecto Provincial Park	☐	8
• Middlehead Trail	☐	9	• Bog Trail	☐	10

Access Point: ______________________________

Type of User: Walker/hiker ☐ 1
Biker/cyclist ☐ 2
ATV ☐ 3

Interviewer Notes: ______________________________

SURVEY OF NOVA SCOTIA TRAIL USERS
PART A

Trail User Characteristics

First, I'd like to ask some questions about you (and your group) to assist in preparing a profile of trail users.

1. What is your permanent place of residence?
City/Town: ______________________
Province/State: ______________________
Other Country: ______________________

2. **Ask Nova Scotia residents only.** Are you going to be travelling more than 80 kilometres from your home or staying overnight on this trip? Yes ☐ No ☐

3. Which of the following best describes your trail use? **Read out. Check one only. If clarification is required, "trail" means hiking, walking, biking or ATV trails.**
   - comfortable for less than a hour ☐ 1
   - comfortable for one or two hours ☐ 2
   - comfortable for two to four hours ☐ 3
   - comfortable for four hours to entire day ☐ 4
   - comfortable on an overnight backpacking trip ☐ 5
   - comfortable on a backpacking trip of more than one night ☐ 6

4. How many *times* did you use a Nova Scotia trail in the last 12 months? **(including this one)**? ______________________

5. How many *different* Nova Scotia trails did you use in the last 12 months **(including this one)**? ______________________

6. How many times did you use a trail outside of Nova Scotia in the last 12 months?_____

Now I'd like to ask some questions about your reasons for visiting this trail today.

7. What kind of experience were you seeking from this trail today? **Do not prompt. Check first four mentions.**
   - mental/physical health benefits ☐ 1
   - family outing ☐ 2
   - be with people ☐ 3
   - solitude ☐ 4
   - experience wilderness ☐ 5
   - explore new places ☐ 6
   - develop skills ☐ 7
   - nature appreciation/study ☐ 8
   - pleasure/fun ☐ 9
   - challenge to abilities ☐ 10
   - no single experience ☐ 11
   - other (please specify)_________ 12

8. Do you live within a 30 minute drive by car of this trail? Yes ☐ No ☐

If answer is "YES", go to question #11.
If answer is "NO", go to the next question.

9a. **Ask out-of-province visitors only**. How much influence, if any, would you say that the system of hiking trails in Nova Scotia had in determining your choice of Nova Scotia as a stop or destination on this trip? Using this scale between 1 and 10 where 0 is no influence and 10 is that the trail system is the main single reason for visiting Nova Scotia on this trip, please choose any number between 0 and 10. **Show respondent the scale and mark one box only.**

no influence 0	1	2	3	4	5	6	7	8	9	single main reason 10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

9b. **Ask Nova Scotia residents only**. How much influence, if any, would you say that the system of hiking trails in Nova Scotia had in determining your choice to take this trip within Nova Scotia? Using this scale between 1 and 10 where 0 is no influence and 10 is that the trail system is the main single reason for taking this trip within Nova Scotia, please choose any number between 0 and 10. **Show respondent the scale and mark one box only.**

no influence 0	1	2	3	4	5	6	7	8	9	single main reason 10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

10. How much influence, if any, would you say that this particular trail had in determining your visit to this area? This area is defined as the area within a 30 minute drive of this trail. Using this scale between 1 and 10 where 0 is no influence and 10 is that this trail is the main single reason for visiting this area, please choose any number between 0 and 10. **Show respondent the scale and mark one box only.**

no influence 0	1	2	3	4	5	6	7	8	9	single main reason 10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Trail Usage Characteristics

Now, I'd like to ask you some questions about your trail use.

11. How did you find out about the ____________ trail? **Do not prompt. Indicate all applicable choices.**

- word of mouth (friends/family/local person) ☐ 1
- tourism information centre ☐ 2
- signage/driving past ☐ 3
- road map ☐ 4
- brochure ☐ 5
- newspaper or magazine story or advertisement ☐ 6
- book ☐ 7
- radio ☐ 8
- TV advertisement ☐ 9
- Internet ☐ 10
- general knowledge (always knew/live here) ☐ 11
- other (please specify) ☐ 12

12. Do you use additional sources of information for other trails in Nova Scotia?
Yes ☐ No ☐

13. **If "YES"**, which other sources of information do you use? **Do not prompt. Indicate all applicable choices.**

- word of mouth (friends/family/local person) ☐ 1
- tourism information centre ☐ 2
- signage/driving past ☐ 3
- road map ☐ 4
- brochure ☐ 5
- newspaper or magazine story or advertisement ☐ 6
- book ☐ 7
- radio ☐ 8
- TV advertisement ☐ 9
- Internet ☐ 10
- general knowledge (always knew/live here) ☐ 11
- other (please specify) ☐ 12

14. How much time did you spend on the ____________ trail today? **If in mid-hike, ask: How much time do you expect to spend on the trail today?**

- days ______
- hours ______

15. How many times did you use the __________ trail in the last 12 months? __________

If the answer is 0, go to question #17.
If the answer is >0, go to the next question.

16. How often do you use the __________________ trail ?

	16a Summer (June-Aug)	16b Fall (Sept.-Nov.)	16c Winter (Dec.-Feb.)	16d Spring (March-May)
• less than once per month	☐	☐	☐	☐
• once per month	☐	☐	☐	☐
• once per week	☐	☐	☐	☐
• twice per week	☐	☐	☐	☐
• 3-6 times per week	☐	☐	☐	☐
• daily	☐	☐	☐	☐

17. Could you please indicate with a "Yes" or "No" whether you did the following activities on the ______________ trail today: **Some of these can be checked by observation.**

	Yes	No		Yes	No
a. walking/hiking	☐	☐	h. photography	☐	☐
b. biking	☐	☐	i. painting	☐	☐
c. jogging	☐	☐	j. picnicking	☐	☐
d. commuting	☐	☐	k. bird watching	☐	☐
e. backpacking	☐	☐	l. wildlife viewing	☐	☐
f. ATV	☐	☐	m. nature study	☐	☐
g. fishing	☐	☐	n. other (please specify)__________________		

18. Are there any other activities you undertake generally on trails? **Do not prompt. Check each activity mentioned.**

a. walking/hiking ☐
b. biking ☐
c. jogging ☐
d. commuting ☐
e. backpacking ☐
f. ATV ☐
g. fishing ☐
h. snowshoeing ☐
i. snowmobiling ☐
j. X-country skiing ☐
k. horseback riding ☐
l. swimming ☐
m. photography ☐
n. painting ☐
o. picnicking ☐
p. birdwatching ☐
q. wildlife viewing ☐
r. nature study ☐
s. other (please specify)______________________

PART B
Expenses

Now I'd like to ask you some questions about your spending on this trip. **Ask respondents to give their answers in Canadian dollars and to include taxes. If respondents from the U.S. or other countries have difficulty providing Canadian dollar figures, record the amounts in their currency and indicate the amounts to be converted.**

19. Including yourself, how many males and females in your group fall into the following age categories? **Ask for ages of all group members and enter total in each category. Do not read every category. Circle the category in which the respondent falls to indicate the age and sex of the respondent. For clarification, the "group" includes all of the people travelling together and sharing expenses.**

	Male	**Female**		**Male**	**Female**
• 14 and under	_____	_____	• 45-54	_____	_____
• 15-19	_____	_____	• 55-64	_____	_____
• 20-24	_____	_____	• 65-74	_____	_____
• 25-34	_____	_____	• 75 and over	_____	_____
• 35-44	_____	_____			

20. **Ask everyone but local respondents.** Within a 30 minute drive of this trail did you (or any other members of your group) spend anything or do you (or any other members of your group) expect to spend anything?
Yes ☐ No ☐

21. **If "Yes", ask:** Estimate how much you (or your group) spent and expect to spend in Canadian dollars in the following categories. Include all spending by you and all members of your group and include all purchases made with credit card, cheque or cash, and include taxes. **Show the respondent the list of categories and go through each one and fill in Column A.**

22. **Ask all non-Nova Scotia residents and N.S. residents who answered "Yes" to Question #2.** What else did you and do you expect to spend elsewhere in Nova Scotia (i.e. beyond a 30 minute drive of the trail) while on this trip in the same categories? **Show the respondent the list of categories again and fill in Column B.**

	A (Q. 21)	B (Q. 22)
Estimated amount spent for:	**Local Area (within 30 min. drive)**	**Nova Scotia (beyond 30 min. drive)**
• Cost of staying in fixed roof accommodations	a.	a.
• Cost of staying at campgrounds	b.	b.
• Meals and beverages in restaurants	c.	c.
• Ferry and/or air fares to and from N.S.	d.	d.
• Auto repairs/gas/oil	e.	e.
• Other transportation fares (taxi and car rental)	f.	f.
• Groceries/liquor	g.	g.
• Other shopping purchases	h.	h.
• Recreation and entertainment	i.	i.
• Inclusive travel package	j.	j.
• Other (please specify)	k.	k.

Opinions on Trail Usage

Now I'd like to ask you some questions about your perceptions and observations of this trail and other trails.

23. For the following trail components, I would like you to whether there should be more, less or the same amount of this component on this specific trail. **Go through each factor one by one. For example, ask the respondent whether they think there should be *more* trail maintenance, *less* trail maintenance or the *same* amount of trail maintenance that is currently done. (Mark NO if the respondent has no opinion.)**

	Less	**Same**	**More**	**NO**
a. Trail maintenance	☐	☐	☐	☐
b. Structures such as boardwalks and stairs	☐	☐	☐	☐
c. Hazards marked/trail safe	☐	☐	☐	☐
d. Level trail surface	☐	☐	☐	☐
e. Directional and distance markers on the trail	☐	☐	☐	☐
f. Interpretive information along the trail on such things as the plants, geology and human history of the area	☐	☐	☐	☐

23. (continued)

	Less	Same	More	NO
g. Washroom facilities available	☐	☐	☐	☐
h. Drinking water available	☐	☐	☐	☐
i. Garbage cans	☐	☐	☐	☐
j. Rest spots/picnic areas	☐	☐	☐	☐
k. Scenic viewing areas	☐	☐	☐	☐
l. Camping areas nearby	☐	☐	☐	☐
m. Accommodations nearby	☐	☐	☐	☐
n. Parking spaces	☐	☐	☐	☐
o. Trail information brochure	☐	☐	☐	☐
p. Location of trailhead well identified along the road	☐	☐	☐	☐
q. Other (please specify)	☐	☐	☐	☐

____

24. Are there any other improvements, additional services, or changes that you would like to see offered on this trail that would increase your usage of this trail?

____

25. There are a number of other factors that may influence your use of trails in Nova Scotia. Would you use trails in Nova Scotia a great deal less (1), somewhat less (2), about the same (3), somewhat more (4) or a great deal more (5) if:

	Use trails a great deal less				Use trails a great deal more	
	1	2	3	4	5	NO
a. More information on specific trails were available in guide books and brochures.	☐	☐	☐	☐	☐	☐
b. There were more signs along the road identifying the exact location of trails.	☐	☐	☐	☐	☐	☐
c. Existing trails were upgraded and improved.	☐	☐	☐	☐	☐	☐
d. More day use trails were constructed in Nova Scotia.	☐	☐	☐	☐	☐	☐
e. More overnight wilderness trails were constructed in Nova Scotia.	☐	☐	☐	☐	☐	☐
f. More interpretive information on such things as the plants, geology and human history of the area were available along trails.	☐	☐	☐	☐	☐	☐
g. Trails offered more rest spots and picnic areas.	☐	☐	☐	☐	☐	☐
h. Trails offered more ocean views.	☐	☐	☐	☐	☐	☐
i. Trails offered more scenic viewing areas.	☐	☐	☐	☐	☐	☐

26. Are there any other improvements, additional services, or changes that you would like to see offered on any other trails you visited in Nova Scotia that would increase your usage of these trails?

27. One of the issues related to trail use in Nova Scotia concerns the multi-use designation of trails where different kinds of users such as hikers, bikes, horses, dog walkers, cross-country skiers, ATVs, snowmobiles and other motorized vehicles share the same trail. What has been your experience with other types of users on trails in Nova Scotia? **Record experience.**

____

____

____

____

28. How do you think trails should be managed to accommodate all types of users? **Record answer.**

____

____

____

____

____

____

29. Please indicate whether you strongly disagree (1), somewhat disagree (2), have no opinion (3), somewhat agree (4), or strongly agree (5) with each of the following statements:

	Strongly Disagree 1	2	**No Opinion** 3	4	**Strongly Agree** 5
a. Motorized off-road vehicles and trail users on foot should share the same trail.	☐	☐	☐	☐	☐
b. More trails in N.S. should be designated for hikers and walkers only.	☐	☐	☐	☐	☐
c. More trails in N.S. should be available for use by motorized off-road vehicles.	☐	☐	☐	☐	☐
d. More trails in N.S. should be available for horse riders.	☐	☐	☐	☐	☐
e. I avoid trails where I am likely to encounter motorized off-road vehicles.	☐	☐	☐	☐	☐
f. I avoid trails where I am likely to encounter bicycles.	☐	☐	☐	☐	☐

Now, I'd like to ask a few final questions about you that will be used to help anlayse our survey results.

30. Which category best describes your highest level of education? **Have respondent point to category.**

- high school incomplete ☐ 1.
- high school complete ☐ 2.
- some tech. school/college/university ☐ 3.
- university complete ☐ 4.

31. In which category does your total household income (before taxes) fall? **Have respondent point to category.**

- under $10,000 ☐ 1.
- $10,000 to $19,999 ☐ 2.
- $20,000 to $29,999 ☐ 3.
- $30,000 to $39,999 ☐ 4.
- $40,000 to $49,999 ☐ 5.
- $50,000 to $59,999 ☐ 6.
- $60,000 to $69,999 ☐ 7.
- $70,000 to $79,999 ☐ 8.
- $80,000 or over ☐ 9.

32. May I ask for your name and phone number so that we can verify your participation in this survey? We will also be following up this survey with some telephone calls on a random basis to have participants expand on some of their perceptions. This information will not be used for any other purpose.

Name:____

Phone Number: (____)______________________________

Thank you for participating in this survey. We hope you enjoyed your visit to this trail.

Thank you for participating in this survey of Nova Scotia Trail Users funded by the Nova Scotia Department of Economic Development and Tourism, the Sport and Recreation Commission and Human Resources Development Canada. This survey aims to gather information on Nova Scotia's trail users and their resulting economic impacts. The information that you provided will be used to guide trail development policies and funding decisions over the next few years.

If you would like more information about this study, or would like to receive a copy of the report in December 1998, please contact:

Stephen Coyle
Nova Scotia Trail Users Survey Project
N.S. Dept. of Economic Development and Tourism
PO Box 519
Halifax, NS
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We hope you enjoyed your visit to this trail and you will return to explore more of Nova Scotia's trail system.

ENQUÊTE AUPRÈS DES UTILISATEURS DES SENTIERS DE LA NOUVELLE-ÉCOSSE

INTRODUCTION

Bonjour, je m' appelle . Nous effectuons une enquête auprès des utilisateurs des sentiers pour le compte de plusieurs ministères provinciaux et fédéral (ministère du Développement économique et du tourisme de la Nouvelle-Écosse, Commission des sports et loisirs de la Nouvelle-Écosse, et Développement des ressources humaines Canada) afin de mieux développer et planifier les pistes de la province. Seriez-vous disposé à nous aider en répondant à des questions sur votre expérience des sentiers? Cela ne vous prendra que 15 minutes et tous les renseignements que vous fournirez seront traités comme confidentiels.

Intervieweur :
Si la réponse est «NON», dire : Merci de votre temps; nous espérons que vous avez apprécié le sentier.
Si la réponse est «OUI», et si le répondant est SEUL, passer au questionnaire.
Si la réponse est «Oui», et si le répondant n'est PAS SEUL, demander : Lequel des membres (âgé de 15 ou plus) du groupe qui vous accompagne a l'anniversaire le plus récent? **Passer au questionnaire avec cette personne. Au besoin, définir le «groupe» comme un nombre de personnes qui se déplacent ensemble et se partagent les frais.**

Intervieweur : ______________________

d' enquête : ______________________

Date (m/j) : ______________________

Heure : ______________________

Sentier : **Cocher la case appropriée.**

- Cape Split ☐
- Dartmouth Urban Trail ☐
- Guysborough Rail Trail ☐
- Annexe côtière de Kejimkujik ☐
- Middlehead Trail ☐
- Parc provincial Blomidon ☐
- Lunenburg Back Harbour Trail ☐
- Tiverton Balancing Rock Trail ☐
- Parc provincial Cape Chignecton ☐
- Bog Trail ☐

Point d' accès : ______________________

Type d' utilisateur : ______________________

Remarques de l' intervieweur : ______________________

ENQUÊTE AUPRÈS DES UTILISATEURS DES SENTIERS DE LA NOUVELLE-ÉCOSSE
PARTIE A

Caractéristiques des utilisateurs des sentiers

D'abord, j'aimerais poser des questions sur vous (et sur votre groupe) qui permettront de dresser le profil des utilisateurs des sentiers.

1. Où se trouve votre domicile permanent?

   Ville : ______________________
   Province/État : ______________________
   Autre pays : ______________________

2. **Question à poser exclusivement aux résidents de la Nouvelle-Écosse.** Est-ce que ce voyage vous amenera à plus de 80 km de votre domicile, ou bien est-ce que vous allez passer la nuit hors de chez vous lors de ce déplacement?
   Oui ☐ Non ☐

3. Laquelle des déclarations ci-dessous décrit le mieux votre utilisation des sentiers? **Lire à haute voix. Cocher une seule case. Au besoin, préciser que par «sentier» il faut entendre les pistes utilisées pour la randonnée pédestre, la marche, le vélo ou les véhicules tout terrain (VTT).**

   - Confortable pendant moins d'une heure ☐
   - Confortable pendant une ou deux heures ☐
   - Confortable pendant deux à quatre heures ☐
   - Confortable entre quatre heures et toute la journée ☐
   - Confortable lors d'une grande randonnée d'une nuit ☐
   - Confortable lors d'une grande randonnée de plus d'une nuit ☐

4. Combien de *fois* avez-vous utilisé un sentier de la Nouvelle-Écosse au cous des 12 derniers mois? ______________________

5. Combien de sentiers *différents* de la Nouvelle-Écosse avez-vous utilisés au cours des 12 derniers mois?______________________

6. Combien de fois avez-vous utilisé un sentier en dehors de la Nouvelle-Écosse au cours des 12 derniers mois? ______________________

Maintenant, j'aimerais poser des questions sur les raisons pour lesquelles vous visitez ce sentier aujourd'hui.

7. Quel genre d'expérience recherchiez-vous sur ce sentier aujourd'hui? **Ne pas fournir d'indice de réponse. Cocher les quatre premières raisons évoquées.**

- gains en santé mentale/physique ☐
- sortie en famille ☐
- être avec les gens ☐
- solitude ☐
- faire l'expérience de la nature sauvage ☐
- découvrir de nouveaux endroits ☐
- développer des aptitudes ☐
- apprécier/étudier la nature ☐
- plaisir/amusement ☐
- éprouver des compétences ☐
- aucune expérience particulière ☐
- autre (donner des détails)__________

8. Est-ce que vous vivez à moins de 30 minutes de voiture de ce sentier?
Oui ☐ Non ☐

Si la réponse est «OUI», passer à la question numéro 11.
Si la réponse est «NON», passer à la question suivante.

9a. **Question à poser exclusivement aux visiteurs résidant hors de la province.** Selon vous, dans quelle mesure le réseau de sentiers de randonnée pédestre de la Nouvelle-Écosse a-t-il influencé, s'il y a lieu, votre décision d'entreprendre ce voyage à l'intérieur de la province? Sur l'échelle suivante graduée de 1 à 10, où 0 représente une influence nulle et 10 signifie que le réseau de sentiers constitue la principale raison pour laquelle vous visitez la Nouvelle-Écosse pendant ce voyage, veuillez choisir un chiffre entre 0 et 10. **Montrer l'échelle au répondant et cocher une seule case.**

aucune influence										principale raison
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

9b. **Question à poser exclusivement aux résidents de la Nouvelle-Écosse.** À votre avis, dans quelle mesure le réseau de sentiers de randonnée pédestre de la Nouvelle-Écosse a-t-il influencé, s'il y a lieu, votre décision d'entreprendre ce voyage à l'intérieur de la province? Sur l'échelle suivante graduée de 1 à 10, où 0 représente une influence nulle et 10 signifie que le réseau de sentiers constitue la principale raison pour laquelle vous visitez la Nouvelle-Écosse pendant ce voyage, veuillez choisir un chiffre entre 0 et 10. **Montrer l'échelle au répondant et cocher une seule case.**

aucune influence										principale raison
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

10. Selon vous, dans quelle mesure ce sentier en particulier a-t-il influencé, s'il y a lieu, votre décision de visiter cette région? Par «cette région» il faut entendre la zone qui se trouve dans un rayon de moins de 30 minutes de voiture par rapport à ce sentier. Sur l'échelle suivante graduée de 1 à 10, où 0 représente une influence nulle et 10 signifie que le réseau de sentiers constitue la principale raison pour laquelle vous visitez la Nouvelle-Écosse pendant ce voyage, veuillez choisir un chiffre entre 0 et 10. **Montrer l'échelle au répondant et cocher une seule case.**

aucune influence										principale raison
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Caractéristiques d'utilisation des sentiers

J'aimerais à présent poser des questions sur votre utilisation du sentier.

11. Comment avez-vous appris l'existence du sentier _____________? **Ne pas fournir d'indice de réponse. Indiquer tous les choix applicables.**

- contacts personnels (amis/famille/résident de la région) ☐
- centre d'information touristique ☐
- affichage/circulation en voiture ☐
- carte routière ☐
- brochure ☐
- article ou publicité dans un journal ou une revue ☐
- livre ☐
- radio ☐
- publicité à la télévision ☐
- Internet ☐
- Connaissances générales ☐
- Autre (donner des détails) ☐

12. Utilisez-vous des sources supplémentaires d'information pour les autres sentiers de la Nouvelle-Écosse? Oui ☐ Non ☐

13. Si «OUI», quelles autres sources d'information utilisez-vous? **Ne pas fournir d'indice de réponse. Indiquer tous les choix applicables.**

- contacts personnels (amis/famille/résident de la région) ☐
- centre d'information touristique ☐
- affichage/circulation en voiture ☐
- carte routière ☐
- brochure ☐
- article ou publicité dans un journal ou une revue ☐
- livre ☐
- radio ☐
- publicité à la télévision ☐
- Internet ☐
- Connaissances générales ☐
- Autre (donner des détails) ☐

14. Combien de temps avez-vous passé sur le sentier ? ______________________
- jours __________
- heures __________

15. Combien de fois avez-vous utilisé le sentier____________au cours des 12 derniers mois? ________________

Si la réponse est 0, passer à la question numéro 17.
Si la réponse est >0, passer à la question suivante.

16. Quelle est votre fréquence d'utilisation du sentier ______________ ?

	Été (juin-août)	Automne (sep.-nov.)	Hiver (déc.-fév.)	Printemps (mars-mai)
• moins d'une fois par mois	☐	☐	☐	☐
• une fois par mois	☐	☐	☐	☐
• une fois par semaine	☐	☐	☐	☐
• deux fois par semaine	☐	☐	☐	☐
• 3-6 fois par semaine	☐	☐	☐	☐
• chaque jour	☐	☐	☐	☐

17. Veuillez bien indiquer par «Oui» ou par «Non» si vous avez effectué les activités suivantes sur le sentier _________________ aujourd'hui. **Certaines des réponses ci-dessous peuvent être cochées sur la foi de l'observation.**

	Oui	Non		Oui	Non
• marche/randonnée pédestre	☐	☐	• photographie	☐	☐
• vélo	☐	☐	• peinture	☐	☐
• jogging	☐	☐	•pique-nique	☐	☐
• migration pendulaire	☐	☐	• observation d'oiseaux	☐	☐
• grande randonnée pédestre	☐	☐	• observation de la faune	☐	☐
• VTT	☐	☐	• étude de la nature	☐	☐
• pêche	☐	☐	• autre (donner des détails) ____________		

18. Y a-t-il d'autres activités auxquelles vous vous livrez généralement sur les sentiers? **Ne pas fournir d'indice de réponse. Cocher chaque activité mentionnée.**

- marche/randonnée pédestre ☐
- vélo ☐
- jogging ☐
- migration pendulaire ☐
- grande randonnée pédestre ☐
- VTT ☐
- pêche ☐
- raquette à neige ☐
- motoneige ☐
- ski de fond ☐
- randonnée à cheval ☐
- nage ☐
- photographie ☐
- peinture ☐
- pique-nique ☐
- observation d'oiseaux ☐
- observation de la faune ☐
- étude de la nature ☐
- Autre (donner des détails) ____________

PARTIE B
Dépenses

Maintenant, j'aimerais vous poser des questions sur les dépenses que vous avez effectuées au cours de ce voyage. **Demander aux répondants de donner leurs réponses en dollars canadiens et d'y inclure les taxes. Si des répondants venant des États-Unis ou d'autres pays ont de la difficulté à fournir des chiffres en dollars canadiens, relever les montants en question dans la devise d'origine et indiquer les sommes qui doivent être converties.**

19. Combien d'hommes et de femmes de votre groupe, y compris vous-même, appartiennent aux catégories d'âge suivantes? **Demander l'âge de tous les membres du groupe et noter le nombre de personnes appartenant à chaque catégorie. Ne pas lire toutes les catégories. Encercler la catégorie à laquelle appartient le répondant pour indiquer son âge et son sexe. Au besoin, préciser que le «groupe» comprend toutes les personnes qui voyagent ensemble et se partagent les frais.**

	Masculin	Féminin
• 14 ans et moins	___	___
• 15-19	___	___
• 20-24	___	___
• 25-34	___	___
• 35-44	___	___
• 44-54	___	___
• 55-64	___	___
• 65-74	___	___
• 75 et plus	___	___

20. **Question à poser à tout le monde, à l'exception des résidents de la région.** À moins de 30 minutes de voiture de ce sentier, est-ce que vous (ou tout autre membre de votre groupe) avez effectué une dépense, ou bien est-ce que vous (ou tout autre membre de votre groupe) vous attendez à effectuer une dépense?

Oui ☐ Non ☐

21. **Si «Oui», demander :** Donnez une estimation des dépenses faites par vous (ou par votre groupe) et des dépenses que vous vous attendez à effectuer en dollars canadiens pour les catégories ci-dessous. Tenez compte de toutes les dépenses faites par vous et par tous les membres de votre groupe, ainsi que de tous les achats effectués avec une carte de crédit, par chèque ou au comptant, y compris les taxes. **Montrer au répondant la liste des catégories, parcourir chacune de celles-ci et remplir la colonne A.**

22. **Question à poser à tous les non-résidents de la Nouvelle-Écosse et aux résidents de la Nouvelle-Écosse qui ont répondu par «Oui» à la question numéro 2.** Quelle somme avez-vous dépensée ou vous attendez-vous à dépenser ailleurs en Nouvelle-Écosse (c'est-à-dire à plus de 30 minutes de voiture de ce sentier) au cours de ce voyage dans les mêmes catégories? **Montrer à nouveau la liste des catégories au répondant et remplir la colonne B.**

Estimation du montant dépensé pour :	A(Q.21) Zone locale(moins de 30 mn de voiture)	B (Q.22) Nouvelle-Écosse (plus de 30 mn de voiture)
• Coût de séjour dans un lieu d'hébergement en dur		
• Coût de séjour sur les terrains de camping		
• Repas et boissons dans les restaurants		
• Frais de traversier et/ou d'avion aller-retour pour la N.-É.		
• Réparation/carburant/huile d'automobile		
• Autres frais de transport (taxi et location de voiture)		
• Épiceries/alcool		
• Autres achats en magasin		
• Loisirs et divertissement		
• Voyage à forfait		
• Autre (donner des détails) ____________		

Opinions sur l'utilisation du sentier

Maintenant, j'aimerais vous poser des questions sur vos impressions et remarques sur ce sentier et sur d'autres sentiers.

23. Pour chacune des composantes suivantes du sentier, j'aimerais que vous indiquiez si l'on devrait en augmenter la proportion, la réduire ou la garder au niveau actuel sur ce sentier en particulier. **Parcourir les facteurs un à la fois. Par exemple, demander au répondant s'il pense qu'il devrait y avoir *plus* d'entretien du sentier, *moins* d'entretien du sentier ou le *même* niveau d'entretien du sentier qu'à l'heure actuelle. (Cocher «NON» si le répondant n'a pas d'opinion).**

	Moins	Même Niveau	Plus	NON
• Entretien du sentier	☐	☐	☐	☐
• Infrastructures telles que les promenades et les escaliers	☐	☐	☐	☐
• Signalisation des risques/ Sécurité du sentier	☐	☐	☐	☐
• Sections du sentier qui ont/ une surface plane	☐	☐	☐	☐
• Balisages de direction et de distance sur le sentier	☐	☐	☐	☐
• Renseignements d'interprétation le long du sentier sur des thèmes comme les plantes et l'histoire géologique et humaine de la région	☐	☐	☐	☐
• Disponibilité des sanitaires	☐	☐	☐	☐
• Disponibilité de l'eau potable	☐	☐	☐	☐
• Poubelles	☐	☐	☐	☐
• Aires de repos/terrains de pique-nique	☐	☐	☐	☐
• Belvédères pour la contemplation des panoramas	☐	☐	☐	☐
• Proximité des terrains de camping	☐	☐	☐	☐
• Proximité des infrastructures d'hébergement	☐	☐	☐	☐
• Aires de stationnement	☐	☐	☐	☐
• Brochures d'information sur le sentier	☐	☐	☐	☐
• Bonne signalisation de l'emplacement du point de départ le long de la route	☐	☐	☐	☐
• Autre (donner des détails)	☐	☐	☐	☐

24. Y a-t-il d'autres améliorations, services supplémentaires ou changements que vous aimeriez que l'on apporte à ce sentier et qui vous feraient augmenter votre niveau d'utilisation de celui-ci?

____

25. Il existe un nombre d'autres facteurs qui peuvent influencer votre utilisation des sentiers de la Nouvelle-Écosse. Est-ce que vous utiliseriez les sentiers de la Nouvelle-Écosse beaucoup moins (1), quelque peu moins (2), au même niveau (3), passablement plus (4) ou nettement plus (5) si :

	Utiliserait les sentiers beaucoup moins 1	2	3	4	**Utiliserait les sentiers nettement plus** 5	NON
• Les livrets-guides et les brochures contenaient plus de renseignements sur des sentiers particuliers	☐	☐	☐	☐	☐	☐
• Des affiches indiquant l'emplacement exact des sentiers étaient placées le long de la route	☐	☐	☐	☐	☐	☐
• Les sentiers existants étaient modernisés et améliorés	☐	☐	☐	☐	☐	☐
• Plus de sentiers utilisables dans la journée étaient construits en Nouvelle-Écosse	☐	☐	☐	☐	☐	☐
• Plus de sentiers pour randonnée d'une nuit dans la nature sauvage étaient construits en Nouvelle-Écosse	☐	☐	☐	☐	☐	☐
• Des renseignements d'interprétation sur des thèmes comme les plantes et l'histoire géologique et humaine de la région étaient disponibles le long des sentiers	☐	☐	☐	☐	☐	☐
• Les sentiers comportaient plus d'aires de repos et de terrains de pique-nique	☐	☐	☐	☐	☐	☐
• Les sentiers offraient plus de vues mer	☐	☐	☐	☐	☐	☐
• Les sentiers avaient plus de belvédères pour la contemplation des panoramas	☐	☐	☐	☐	☐	☐

26. Y a-t-il d'autres améliorations, services supplémentaires ou changements que vous aimeriez que l'on apporte à tout autre sentier que vous avez visité en Nouvelle-Écosse et qui vous feraient augmenter votre niveau d'utilisation de ces sentiers?

____

27. L'un des problèmes liés à l'utilisation de sentiers en Nouvelle-Écosse est l'affectation des sentiers à des usages multiples, ce qui amène différents types d'utilisateurs tels que les randonneurs, les cyclistes, les cavaliers, les gens qui promènent leurs chiens, les skieurs de fond, les VTT, les motoneiges et d'autres véhicules automobiles à partager le même sentier. Quelle a été votre expérience des autres types d'utilisateurs sur les sentiers de la Nouvelle-Écosse? **Noter l'expérience.**

____

____

____

____

28. D'après vous, comment devrait-on gérer les sentiers de manière à satisfaire tous les types d'utilisateurs? **Noter la réponse.**

____

____

____

____

29. Veuillez indiquer si vous êtes complètement en désaccord (1), quelque peu en désaccord (2), sans opinion (3), plutôt d' accord (4) ou entièrement d' accord (5) par rapport à chacune des cinq déclarations suivantes :

	Complètement en désaccord 1	2	3	4	**Entièrement d' accord** 5
• Les véhicules automobiles hors-route et les utilisateurs de sentier qui sont à pied devraient partager le même sentier	☐	☐	☐	☐	☐
• Un plus grand nombre de sentiers de la Nouvelle-Écosse devraient être réservés Exclusivement aux randonneurs pédestres et aux marcheurs	☐	☐	☐	☐	☐
• Il devrait être possible d' utiliser les véhicules automobiles hors-route sur un plus grand nombre de sentiers de la Nouvelle-Écosse	☐	☐	☐	☐	☐
• Les cavaliers devraient utiliser un plus grand nombre de sentiers de la Nouvelle-Écosse	☐	☐	☐	☐	☐
• J' évite les sentiers où je risque de rencontrer des véhicules automobiles hors-route	☐	☐	☐	☐	☐
• J' évite les sentiers où je risque de rencontrer des bicyclettes.	☐	☐	☐	☐	☐

30. Quelle est la catégorie qui correspond le mieux à votre plus haut niveau de scolarisation? **Demander au répondant de désigner une catégorie.**

- école secondaire non terminée ☐
- école secondaire terminée ☐
- études inachevées dans une école technique/un collège/une université ☐
- études universitaires terminées ☐

31. Dans quelle catégorie se situe le revenu total (avant impôts) de votre ménage? **Demander au répondant de désigner une catégorie.**

- moins de 10 000$ ☐
- 10 000$ à 19 999$ ☐
- 20 000$ à 29 999$ ☐
- 30 000$ à 39 999$ ☐
- 40 000$ à 49 999$ ☐
- 50 000$ à 59 999$ ☐
- 60 000$ à 69 999$ ☐
- 70 000$ à 79 999$ ☐
- 80 000$ ou plus ☐

32. Puis-je avoir votre nom et votre numéro de téléphone afin que nous puissions vérifier votre participation à cette enquête? Nous allons aussi assurer le suivi de cette enquête en téléphonant au hasard à des participants pour leur demander d' expliciter certaines de leurs impressions. Ce renseignement ne sera utilisé à aucune autre fin.

Nom : ______________________________

Numéro de téléphone : ______________________________

Merci d' avoir participé à cette enquête. Nous espérons que vous avez apprécié votre visite à ce sentier.

Merci d'avoir participé à cette enquête menée auprès des utilisateurs des sentiers de la Nouvelle-Écosse et financée par le ministère du Développement économique et du tourisme de la Nouvelle-Écosse, la Commission des sports et loisirs, et Développement des ressources humaines Canada. Cette enquête a pour objectif de recueillir des informations sur les utilisateurs des sentiers de la Nouvelle-Écosse et sur l'impact économique de leurs activités. Les renseignements que vous avez fournis serviront à orienter les politiques de développement des sentiers et les décisions de financement au cours des prochaines années.

Si vous désirez recevoir plus de renseignements sur cette étude ou si vous souhaitez obtenir un exemplaire du rapport qui paraîtra en décembre 1998, veuillez vous adresser à :

Stephen Coyle
Nova Scotia Trail Users Project
N.S. Dept. of Economic Development
and Tourism
B.P 519
Halifax, N.-É.
B3J 2K5

Téléphone : (902) 424-4264
Télécopieur : (902) 424-0723
Courriel : econ.scoyle@gov.ns.ca

Nous espérons que vous avez apprécié votre visite à ce sentier et que vous reviendrez pour découvrir davantage le réseau de sentiers de la Nouvelle-Écosse.

Appendix C

Estimating Total Trail Use

Adjusting for Double Counting

The sample counts made by the surveyors were used to calculate the average daily number of trail users on each trail in the summer and in the fall. We developed average counts per hour and used these to create average usage per day based on the 12-15 survey days per trail, depending on the trail. Where sample counts included total counts of people entering and exiting the trail, they were adjusted for double counting by dividing them by 1.5. This formula was derived from a comparison of our sample Tiverton counts and the actual daily counts provided by a volunteer with the Tiverton Board of Trade. To prevent over-estimating, these double-counts were then scaled down by dividing them by 1.67. A mid-point between the ranges was then used. While the rate of double counting would have in fact been different for each trail due to unknown variables such as the length of time users spent on the trail, this standard conversion was used for all of the trails for consistency. Straight counts of trail users exiting the trails required no adjusting.

Summer and Fall Trail Usage

The average summer and fall trail use rates were then used to estimate the total trail usage for each individual trail. The summer season for these calculations extended from July 1 to September 7 (Labour Day) which is 69 days. The fall season was shorter extending from September 8 to October 12 (35 days). Trail use was expected to fall after Thanksgiving weekend because of a combination of factors including colder weather, the hunting season, and most parks being closed.

The average daily fall use was considerably lower than the average daily summer trail use. The difference varied between 43% and 78%, with the lowest difference found on the Middle Head Trail and the highest difference on the Tiverton Trail. Seven out of the nine study trails were found to have at least a 50% drop in use in the fall. This decline in use could be explained by a number of factors including fewer people on vacation, fewer tourists, colder and wetter weather, and fewer hours of daylight. The surveyors noted that weather alone played a large role in keeping the fall counts down as there were sometimes no users on trails on cold, wet days.

Spring Usage

As no spring usage counting was done during the 2 months of spring, the spring trail usage was estimated according to seasonal patterns of Nova Scotia tourism and fall trail usage patterns. Trail use in May was estimated at 70% of June use, based on the seasonal patterns of Nova Scotia tourism in recent years. June use was assumed to be equal to the fall trail use. This assumption was made based on the frequent user seasonal trail use information which showed that the fall and spring use were similar. A similar assumption was made in the Ghost Town Trail study. In fact, trail use in the spring may be lower due to wet weather and insects. A calculation of winter use was not attempted because there was no data on which to base such an estimate.

Total Trail Usage

The total trail usage according to these calculations was highest on the three trails which are known to be popular with tourists (i.e. Bog, Middle Head, and Tiverton). However, the Bog total use (33,200) was nearly twice as high as these other two trails. The Dartmouth Multi-Use Trail had the fourth highest use (13,300) and this was considerably higher than the next highest used trails that included the Keji Seaside Adjunct Trail (7,900) and Cape Split (7,600). The Lunenburg Back Harbour Trail (4,000) received only limited local use, while the Cape Chignecto (2,200) and Blomidon (2,000) trails were found to have the lowest uses.

Appendix D

Detailed Survey Results

Nova Scotia Hiking/Walking Trail Survey

Variable Number	Name of Variable	Type of Variable	Variable Values
1	Interviewer	Text	Names
2	Survey #	Real	1 - 558
3	Date	Calender	Date
4	Time of Interview	Real	Time in minutes
5	Interview Duration	Real	Time in minutes
6	Trail	Category	Blomidon Provincial Park
			Bog Trail
			Cape Chignecto Provincial Park
			Cape Split
			Dartmouth Urban Trail
			Guysborough Rail Trail
			Kejimkujik Seaside Adjunct
			Lunenburg Back Harbour Trail
			Middlehead Trail
			Tiverton Balancing Rock Trail
7	Access Point	Category	Trail head
			Mid Trail
			Exit
			Other
8	Type of User	Category	Walker/hiker
			Bicyclist
			ATV
9	City/Town	Category	(See list at end)
10	Province/State	Category	(See list at end)
11	Other Country	Category	(See list at end)
12	Q2, Travelling more than 80 km or staying overnight	Category	Will
			Will not
13	Personal Trail Use (Q3)	Category	comfortable for less than a hour
			comfortable for one or two hours
			comfortable for two to four hours
			comfortable for four hours to entire day
			comfortable on an overnight backpacking trip
			comfortable on a backpacking trip of more than one night
14	Frequency of trail use, last 12 months (Q4)	Real	Number
15	Number of different NS trails used last 12 months (Q5)	Real	Number
16	Frequncy of trail use outside Nova Scotia (Q6)	Real	Number
17	Experience sought from trail (Q7)	Category	mental/physical health benefits
			family outing
			be with people
			solitude
			experience wilderness
			explore new places
			develop skills
			nature appreciation/study
			pleasure/fun
			challenge to abilities
			no single experience
			other (please specify)
18	Experience sought from trail (2nd)	Category	Same as above
19	Experience sought from trail (3rd)	Category	Same as above
20	Experience sought from trail (4th)	Category	Same as above
21	Live within 30 minute drive of this trail?	Category	Do
			Do not
22	Non-residents, influence of system of hiking trails? (9a)	Real	"1,2,3,...,10"
23	Residents, influence of system of hiking trails? (9b)	Real	"1,2,3,...,10"
24	Influence of particular trail on choice of destination? (Q10)	Real	"1,2,3,...,10"

Variable Number	Name of Variable	Type of Variable	Variable Values
25	Information about trail (Q11)	Category	word of mouth (friends/family/local person) tourism information centre signage/driving past road map brochure newspaper or magazine story or advertisement book radio TV advertisement Internet general knowledge (always knew/live here) other (please specify)
26	Information about trail (2nd)	Category	Same as above
27	Information about trail (3rd)	Category	Same as above
28	Information about trail (4th)	Category	Same as above
29	Book (used as source of trail information)	Category	Doers and Dreamers Fodors Frohmer's Guide Mike Haynes book
30	Use additional sources of information for other NS trails ?	Category	Yes No
31	Additional sources of information for other trails (Q13)?	Category	Same as Variable 25
32	Additional sources of information for other trails (2nd)	Category	Same as Variable 26
33	Additional sources of information for other trails (3rd)	Category	Same as Variable 27
34	Additional sources of information for other trails (4th)	Category	Same as Variable 28
35	Time spent on trail today? (Q14)	Real	Time in hours
36	Times used trail in last 12 months? (Q15)	Real	Number
37	Frequency of trail use in summer? (16a)	Category	less than once per month once per month once per week twice per week 3-6 times per week daily
38	Frequency of trail use in fall? (16b)	Category	Same as above
39	Frequency of trail use in winter? (16c)	Category	Same as above
40	Frequency of use in spring? (16d)	Category	Same as above
	Activties on the trail today		
41	Walking/hiking (17a)	Category	Yes/No
42	Biking (17b)	Category	Yes/No
43	Jogging (17c)	Category	Yes/No
44	Commuting (17d)	Category	Yes/No
45	Backpacking (17e)	Category	Yes/No
46	ATV (17f)	Category	Yes/No
47	Fishing (17g)	Category	Yes/No
48	Photography (17h)	Category	Yes/No
49	Painting (17i)	Category	Yes/No
50	Picnicking (17j)	Category	Yes/No
51	Bird watching (17k)	Category	Yes/No
52	Wildlife viewing (17l)	Category	Yes/No
53	Nature study (17m)	Category	Yes/No
54	Other (17 n)	Category	Yes/No
	Other activities generally undertaken on trails		
55	Walking/hiking (18a)	Category	Yes/Blank
56	Biking(18b)	Category	Yes/Blank
57	Jogging(18c)	Category	Yes/Blank
58	Commuting(18d)	Category	Yes/Blank
59	Backpacking(18e)	Category	Yes/Blank
60	ATV(18f)	Category	Yes/Blank
61	Fishing(18g)	Category	Yes/Blank
62	Snowshoeing (18h)	Category	Yes/Blank
63	Snowmobiling (18i)	Category	Yes/Blank
64	X-country skiing (18j)	Category	Yes/Blank
65	Horseback riding (18k)	Category	Yes/Blank
66	Swimming (18l)	Category	Yes/Blank

Variable Number	Name of Variable	Type of Variable	Variable Values
67	Photography (18m)	Category	Yes/Blank
68	Painting (18n)	Category	Yes/Blank
69	Picnicking (18o)	Category	Yes/Blank
70	Bird watching (18p)	Category	Yes/Blank
71	Wildlife viewing (18q)	Category	Yes/Blank
72	Nature study (18r)	Category	Yes/Blank
73	Other (18s)	Category	Yes/Blank
	Hiking/walking party by Sex and Age		
74	Males, 14 and under Male	Real	Number, or blank/missing
75	Male, 15-19 Male	Real	Number, or blank/missing
76	Male, 20-24 Male	Real	Number, or blank/missing
77	Male, 25-34 Male	Real	Number, or blank/missing
78	Male, 35-44 Male	Real	Number, or blank/missing
79	Male, 45-54 Male	Real	Number, or blank/missing
80	Male, 55-64 Male	Real	Number, or blank/missing
81	Male, 65-74 Male	Real	Number, or blank/missing
82	Male, 75 + Male	Real	Number, or blank/missing
83	Female, 14 and under Female	Real	Number, or blank/missing
84	Female, 15-19 Female	Real	Number, or blank/missing
85	Female, 20-24 Female	Real	Number, or blank/missing
86	Female, 25-34 Female	Real	Number, or blank/missing
87	Female, 35-44 Female	Real	Number, or blank/missing
88	Female, 45-54 Female	Real	Number, or blank/missing
89	Female, 55-64 Female	Real	Number, or blank/missing
90	Female, 65-74 Female	Real	Number, or blank/missing
91	Female, 75 + Female	Real	Number, or blank/missing
92	Non-local respondents, spend within 30 minute drive? (Q20)	Category	Yes/No; blank if local respondent
	Spending in Local Area (within 30 minute drive of trail)		
93	Q21a, Fixed Roof Accommodation	Real	Dollar amount or blank
94	Q21b, Campgrounds	Real	Dollar amount or blank
95	Q21c, Meals and beverages in restaurants	Real	Dollar amount or blank
96	Q21d, Ferry and/or air fares to and from NS	Real	Dollar amount or blank
97	Q21e, Auto repairs, gas/oil	Real	Dollar amount or blank
98	Q21f, Taxi, car rental	Real	Dollar amount or blank
99	Q21g, Groceries, liquor	Real	Dollar amount or blank
100	Q21h, Other shopping purchases	Real	Dollar amount or blank
101	Q21i, Recreation and entertainment	Real	Dollar amount or blank
102	Q21j, Inclusive travel package	Real	Dollar amount or blank
103	Q21k, Other	Real	
	Spending in Nova Scotia (beyond 30 minute drive of trail)		
104	Q22a, Fixed Roof Accommodation	Real	Dollar amount or blank
105	Q22b, Campgrounds	Real	Dollar amount or blank
106	Q22c, Meals and beverages in restaurants	Real	Dollar amount or blank
107	Q22d, Ferry and/or airfares to and from NS	Real	Dollar amount or blank
108	Q22e, Auto repairs, gas/oil	Real	Dollar amount or blank
109	Q22f, Taxi, car rental	Real	Dollar amount or blank
110	Q22g, Groceries, liquor	Real	Dollar amount or blank
111	Q22h, Other shopping purchases	Real	Dollar amount or blank
112	Q22i, Recreation and entertainment	Real	Dollar amount or blank
113	Q22j, Inclusive travel package	Real	Dollar amount or blank
114	Q22k, Other	Real	Dollar amount or blank
	Opinions on Trail Usage		
115	Q23a, Trail maintenance	Category	Less/Same/More/No Opinion
116	Q23b, Structures		Less/Same/More/No Opinion
117	Q23c, Hazards marked, trail safe		Less/Same/More/No Opinion
118	Q23d, Level trail surface		Less/Same/More/No Opinion
119	Q23e, Direction and distance markers on trail		Less/Same/More/No Opinion
120	Q23f, Interpretive information on trail		Less/Same/More/No Opinion
121	Q23g, Washrooms available		Less/Same/More/No Opinion
122	Q23h, Drinking water available		Less/Same/More/No Opinion
123	Q23i, Garbage cans		Less/Same/More/No Opinion

Variable Number	Name of Variable	Type of Variable	Variable Values
124	Q23j, Rest spots/picnic areas		Less/Same/More/No Opinion
125	Q23k, Scenic viewing areas		Less/Same/More/No Opinion
126	Q23l, Camping areas nearby		Less/Same/More/No Opinion
127	Q23m, Accommodations nearby		Less/Same/More/No Opinion
128	Q23n, Parking spaces		Less/Same/More/No Opinion
129	Q23o, Trail information brochure		Less/Same/More/No Opinion
130	Q23p, Trailhead well identified on road		Less/Same/More/No Opinion
131	Q23q, Other		Less/Same/More/No Opinion
	Factors influencing trail use		
132	Q25a, More information on specific trails	Real	1, Use trails a great deal less 2, Use trails somewhat less 3, Use trail same amount 4, Use trails somewhat more 5, Use trails a great deal more
133	Q25b, More signs along road	Real	Same as above
134	Q25c, Existing trails upgraded/improved	Real	Same as above
135	Q25d, More day use trails	Real	Same as above
136	Q25e, More wilderness trails constructed	Real	Same as above
137	Q25f, More interpretive information on trails	Real	Same as above
138	Q25g, More rest spots , picnic areas	Real	Same as above
139	Q25h, More ocean views	Real	Same as above
140	Q25i, More scenic viewing areas	Real	Same as above
	Statements of feeling		
141	Q29a, Motorized off-roads vehicles share trail with users c	Real	1, Strongly disagree 2, Somewhat disagree 3, No Opinion 4, Somewhat agree 5, Strongly agree
142	Q29b, More trails designated for hikers/walkers	Real	Same as above
143	Q29c, More trails for motorized off-road vehicles	Real	Same as above
144	Q29d, More trails for horse riders	Real	Same as above
145	Q29e, I avoid trails with motorized off-road vehicles	Real	Same as above
146	Q29f, I avoid trails with bicycles	Real	Same as above
147	Highest level of education	Category	high school incomplete high school complete some tech. school/college/university university complete
148	Total household income	Category	under $10,000 $10,000 to $19,999 $20,000 to $29,999 $30,000 to $39,999 $40,000 to $49,999 $50,000 to $59,999 $60,000 to $69,999 $70,000 to $79,999 $80,000 or over
	The following variables were created from the original survey data. Where a variable had a missing value in the original data, that vaue is replaced by a zero in these variables. This was done to allow the calculation of survey averages and totals.		
149	Male 14 and less	Real	Number
150	Male 15-19	Real	Number
151	Male 20-24	Real	Number
152	Male 25-34	Real	Number
153	Male35-44	Real	Number
154	Male 45-54	Real	Number
155	Male 55-64	Real	Number
156	Male 65-74	Real	Number
157	Male 75+	Real	Number
158	Males	Real	Number
159	Female 14 and less	Real	Number
160	Female 15-19	Real	Number

Variable Number	Name of Variable	Type of Variable	Variable Values
161	Female 20-24	Real	Number
162	Female 25-34	Real	Number
163	Female 35-44	Real	Number
164	Female 45-54	Real	Number
165	Female 55-64	Real	Number
166	Female 65-74	Real	Number
167	Female 75+	Real	Number
168	Females	Real	Number
169	Total People	Real	Number
170	Q21, Fixed Roof	Real	$ value
171	Q21, Campground	Real	$ value
172	Q21, Meals	Real	$ value
173	Q21, Ferry/Air Fares	Real	$ value
174	Q21, Auto gas	Real	$ value
175	Q21, Taxi/car rental	Real	$ value
176	Q21, Groceris,liquor	Real	$ value
177	Q21, Other shopping	Real	$ value
178	Q21, Recreation	Real	$ value
179	Q21, Package travel	Real	$ value
180	Q21, Other	Real	$ value
181	Total Spending (within 30 minutes)	Real	$ value
182	Q22, Fixed Roof	Real	$ value
183	Q22, Campgrounds	Real	$ value
184	Q22, Meals,beverages	Real	$ value
185	Q22, Ferry	Real	$ value
186	Q22, Auto gas, repairs	Real	$ value
187	Q22, Taxis	Real	$ value
188	Q22, Groceries	Real	$ value
189	Q22, Other shopping	Real	$ value
190	Q22, Recreation	Real	$ value
191	Q22, Package travel	Real	$ value
192	Q22, Other	Real	$ value
193	Total Spending (beyond 30 minutes)	Real	$ value
196	Grand Total Spending	Real	$ value
	This variable is used to group the trails.		
197	Trail Type	Category	Urban trail - Dartmouth Urban Trail - Lunenburg Back Harbour Hiking/walking trail - Cape Split - Blomidon Provincial Park - Cape Chignecto Provincial park - Kejimkujik Seaside Adjunct Tourist trail - Tiverton Balancing Rock - Bog Trail - Middlehead

Trail Use and Trail Users

Frequency Distribution for Type of User
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Walker/hiker	549	86	195	268
Biker/cyclist	7	3	4	0
Total	556	89	199	268

Frequency Distribution for City/Town
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Halifax	41	0	31	10
Truro	5	0	4	1
Kentville	11	0	11	0
Digby	1	0	0	1
Antigonish	3	1	0	2
Sydney	9	0	1	8
Other NS	66	5	49	12
Fredericton	3	0	1	2
Quebec City	1	0	0	1
Montreal	10	0	1	9
Toronto	23	0	7	16
Dartmouth	54	45	6	3
Lunenburg	34	34	0	0
Ottawa	13	1	3	9
Charlottetown	1	0	1	0
Calgary	2	0	1	1
Total	277	86	116	75

Frequency Distribution for Province/State
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Nova Scotia	224	85	102	37
New Brunswick	9	0	3	6
Prince Edward Island	3	0	2	1
Newfoundland	1	0	0	1
Quebec	16	0	3	13
Ontario	72	3	18	51
Manitoba	3	0	0	3
Saskatchewan	2	0	0	2
Alberta	10	0	3	7
British Columbia	6	0	2	4
Maine	5	0	3	2
New Hampshire	4	0	1	3
Massachusetts	23	0	7	16
New York	27	0	10	17
Missouri	3	0	0	3
Tennessee	2	0	0	2
Arizona	1	0	1	0
Illinois	7	0	0	7
Texas	4	0	2	2
Indiana	1	0	0	1
Florida	9	1	3	5
Rhode Island	2	0	1	1
California	5	0	1	4
Philadelphia	1	0	0	1
Connecticut	10	0	2	8
Vermont	3	0	1	2
Ohio	4	0	1	3
North Carolina	3	0	0	3
Wisconsin	5	0	0	5
Georgia	2	0	1	1
Delaware	2	0	0	2
Virginia	10	0	3	7
Kentucky	1	0	0	1
Pennsylvania	6	0	0	6
Maryland	6	0	2	4
District of Columbia	1	0	0	1
New Jersey	3	0	0	3
Kansas	1	0	0	1
Minnesota	3	0	2	1
Washington	1	0	1	0
Michigan	2	0	0	2
Alabama	1	0	0	1
Colorado	1	0	0	1
South Carolina	1	0	0	1
Mississippi	1	0	1	0
Total	507	89	176	242

Frequency Distribution for Other Country

Split By: Trail Type

Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Hiking/Walking Count	Tourist Count
Great Britain	9	4	5
France	1	0	1
Germany	17	10	7
Holland	4	1	3
Ireland	1	0	1
Belgium	2	1	1
Australia	4	1	3
South Africa	1	0	1
Japan	1	0	1
Switzerland	5	3	2
New Zealand	1	1	0
Austria	1	1	0
Spain	1	1	0
Norway	1	0	1
Total	49	23	26

Frequency Distribution for Highest level of education

Split By: Trail Type

Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
High school incomplete	9	6	2	1
High school complete	71	29	15	27
Some university/college, t...	124	25	53	46
University complete	334	24	124	186
Total	538	84	194	260

Frequency Distribution for Total household income

Split By: Trail Type

Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Under $10,000	6	2	3	1
$10,000 to 19,999	12	3	7	2
$20,000 to 29,999	18	7	6	5
$30,000 to 39,999	37	9	17	11
$40,000 to 49,999	34	9	18	7
$50,000 to 59,999	43	13	15	15
$60,000 to 69,999	40	5	18	17
$70,000 to 79,999	26	3	7	16
$80,000 +	152	8	46	98
Total	368	59	137	172

Frequency Distribution for Personal Trail Use (Q3)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Comfortable less than 1 hour	100	30	9	61
Comfortable 1 to 2 hours	196	50	36	110
Comfortable 2 to 4 hours	144	4	85	55
Comfortable 4 hours to enti...	78	2	48	28
Comfortable on overnight b...	12	0	10	2
Comfortable on multi-night ...	20	0	11	9
Total	550	86	199	265

Frequency Distribution for Experience sought from trail (Q7)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Mental/physical health bene...	214	62	86	66
Family outing	5	0	2	3
Solitude	12	1	8	3
Experience wilderness	40	6	25	9
Explore new places	29	0	14	15
Develop skills	2	1	0	1
Nature appreciation/study	44	2	7	35
Pleasure/fun	3	0	0	3
No single experience	23	0	2	21
Other	120	13	35	72
Wildlife	43	1	14	28
Scenery	16	1	5	10
Total	551	87	198	266

Frequency Distribution for Experience sought from trail (2nd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Family outing	30	4	13	13
Be with people	18	1	10	7
Solitude	18	6	12	0
Experience wilderness	29	7	11	11
Explore new places	17	1	12	4
Develop skills	3	2	0	1
Nature appreciation/study	28	3	10	15
Pleasure/fun	12	5	6	1
Challenge to abilities	1	0	1	0
No single experience	2	0	0	2
Other	65	5	23	37
Wildlife	11	0	4	7
Scenery	15	0	5	10
Total	249	34	107	108

Frequency Distribution for Experience sought from trail (3rd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Be with people	12	1	6	5
Solitude	3	0	3	0
Experience wilderness	18	1	11	6
Explore new places	22	1	6	15
Nature appreciation/study	11	1	6	4
Pleasure/fun	3	0	3	0
Challenge to abilities	1	0	1	0
No single experience	2	2	0	0
Other	30	5	11	14
Wildlife	3	0	0	3
Scenery	1	0	1	0
Total	106	11	48	47

Frequency Distribution for Experience sought from trail (4th)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Solitude	3	1	2	0
Experience wilderness	2	0	0	2
Explore new places	20	0	14	6
Pleasure/fun	3	1	0	2
Other	3	1	1	1
Wildlife	1	0	0	1
Scenery	1	0	1	0
Total	33	3	18	12

Frequency Distribution for Live within 30 minute drive of this trail?
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Do	119	84	31	4
Do not	436	5	167	264
Total	555	89	198	268

Frequency Distribution for Q2, Travelling more than 80 km or staying overnight
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Will	102	2	67	33
Will not	120	83	33	4
Total	222	85	100	37

Age Distribution of Trail User Parties

The following tables show the number of males and females in each trail user party interviewed. For example, 517 parties had no Males under 14, 30 parties had one Male under 14, 7 parties had 2 Males under 14, one party had 3 Males under 14 and one party had 4 Males under 14.

Males

Frequency Distribution for Male 14 and less
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	517	88	187	242
1	2	30	1	9	20
2	3	7	0	2	5
3	4	1	0	1	0
4	5	1	0	0	1
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 15-19
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	546	89	195	262
1	2	7	0	3	4
2	3	3	0	1	2
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 20-24
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	535	86	186	263
1	2	20	3	12	5
2	3	0	0	0	0
3	4	0	0	0	0
4	5	1	0	1	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 25-34
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	468	87	148	233
1	2	82	2	46	34
2	3	5	0	4	1
3	4	1	0	1	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male35-44
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	454	78	160	216
1	2	96	11	34	51
2	3	6	0	5	1
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 45-54
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	431	80	160	191
1	2	122	9	37	76
2	3	3	0	2	1
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 55-64
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	469	83	178	208
1	2	83	6	20	57
2	3	4	0	1	3
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 65-74
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	506	80	182	244
1	2	46	9	16	21
2	3	4	0	1	3
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Male 75+
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	552	87	198	267
1	2	4	2	1	1
2	3	0	0	0	0
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Females

Frequency Distribution for Female 14 and less
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	523	88	191	244
1	2	22	1	6	15
2	3	10	0	2	8
3	4	1	0	0	1
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 15-19
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	544	89	195	260
1	2	10	0	4	6
2	3	2	0	0	2
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 20-24
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	533	88	185	260
1	2	22	1	13	8
2	3	0	0	0	0
3	4	1	0	1	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 25-34
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	447	83	148	216
1	2	98	6	45	47
2	3	9	0	5	4
3	4	2	0	1	1
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 35-44
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	440	76	155	209
1	2	102	11	37	54
2	3	13	2	6	5
3	4	1	0	1	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 45-54
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	422	78	160	184
1	2	129	10	37	82
2	3	4	1	2	1
3	4	1	0	0	1
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 55-64
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	470	72	179	219
1	2	74	16	19	39
2	3	10	1	1	8
3	4	2	0	0	2
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 65-74
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	512	78	189	245
1	2	43	11	10	22
2	3	0	0	0	0
3	4	1	0	0	1
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

Frequency Distribution for Female 75+
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	549	85	198	266
1	2	5	3	0	2
2	3	2	1	1	0
3	4	0	0	0	0
4	5	0	0	0	0
5	6	0	0	0	0
	Total	556	89	199	268

TRAIL SOURCES OF INFORMATION

Frequency Distribution for Information about trail (Q11)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Word of mouth (friends,fam...	169	27	88	54
Tourism Information Centre	68	0	17	51
Signage/driving past	39	0	5	34
Road map	71	0	14	57
Brochure	42	0	11	31
Newspaper, magazine story...	9	1	6	2
Book	33	0	23	10
Internet	2	0	1	1
General knowledge (always ...	112	57	30	25
Other	10	4	3	3
Total	555	89	198	268

Frequency Distribution for Information about trail (2nd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Tourism Information Centre	11	0	4	7
Signage/driving past	11	1	6	4
Road map	24	0	14	10
Brochure	19	0	5	14
Newspaper, magazine story...	1	0	0	1
Book	16	0	12	4
Radio	1	0	1	0
TV advertisement	2	0	1	1
General knowledge (always ...	7	1	5	1
Other	7	0	1	6
Total	99	2	49	48

Frequency Distribution for Information about trail (3rd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Hiking/Walking Count	Tourist Count
Signage/driving past	2	1	1
Road map	7	4	3
Brochure	5	3	2
Book	9	6	3
Other	5	2	3
Total	28	16	12

Frequency Distribution for Information about trail (4th)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Hiking/Walking Count	Tourist Count
Road map	1	0	1
Brochure	2	1	1
Book	3	3	0
General knowledge (always ...	1	1	0
Tota	7	5	2

Frequency Distribution for Book*
Split By: Trail Type
Inclusion criteria: Excluding Guysborough from Trails Data Oct. 22-TP

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Doers and Dreamers	36	1	14	21
Frohmer's Guide	4	0	2	2
Mike Haynes	8	3	3	2
Fodors	2	0	1	1
Total	50	4	20	26

*Some people volunteered information about their use of specific books for trail information.

Frequency Distribution for Use additional sources of information for other NS trails ? (Q12)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	307	20	130	157
No	248	69	68	111
To...	555	89	198	268

Frequency Distribution for Additional sources of information for other trails (Q13)?
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Word of mouth (friends,fam...	55	4	29	22
Tourism Information Centre	73	1	34	38
Signage/driving past	5	0	2	3
Road map	20	1	9	10
Brochure	37	3	12	22
Newspaper, magazine story...	3	0	2	1
Book	97	8	37	52
Radio	1	0	1	0
Internet	6	0	2	4
General knowledge (always ...	2	1	1	0
Other	8	2	2	4
Total	307	20	131	156

Frequency Distribution for Additional sources of information for other trails (2nd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Tourism Information Centre	12	0	4	8
Signage/driving past	8	0	5	3
Road map	9	0	3	6
Brochure	37	3	16	18
Newspaper, magazine story...	3	0	2	1
Book	38	1	16	21
Radio	2	1	1	0
TV advertisement	1	0	0	1
Internet	2	0	0	2
General knowledge (always ...	1	0	1	0
Other	4	0	1	3
Total	117	5	49	63

Frequency Distribution for Additional sources of information for other trails (3rd)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Signage/driving past	2	0	2	0
Road map	5	0	2	3
Brochure	8	0	2	6
Newspaper, magazine story...	1	0	1	0
Book	12	0	5	7
Radio	1	0	1	0
Internet	2	1	1	0
General knowledge (always ...	1	1	0	0
Other	5	0	3	2
Total	37	2	17	18

Frequency Distribution for Additional sources of information for other trails (4th)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Hiking/Walking Count	Tourist Count
Brochure	3	2	1
Book	6	2	4
General knowledge (always ...	1	0	1
Other	1	1	0
Total	11	5	6

Frequency Distribution for Frequency of trail use in summer? (16a)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less than once per month	62	4	35	23
Once per month	16	7	9	0
Once per week	13	9	4	0
Twice per week	24	13	11	0
Three to six times per week	31	23	8	0
Daily	33	32	0	1
Total	179	88	67	24

Frequency Distribution for Frequency of trail use in fall? (16b)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less than once per month	44	4	38	2
Once per month	8	3	5	0
Once per week	16	11	5	0
Twice per week	14	10	4	0
Three to six times per week	20	19	1	0
Daily	30	29	0	1
Total	132	76	53	3

Frequency Distribution for Frequency of trail use in winter? (16c)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less than once per month	50	13	37	0
Once per month	9	3	6	0
Once per week	7	5	2	0
Twice per week	9	8	1	0
Three to six times per week	13	11	1	1
Daily	26	26	0	0
Total	114	66	47	1

Frequency Distribution for Frequency of use in spring? (16d)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less than once per month	39	4	34	1
Once per month	8	3	5	0
Once per week	8	6	2	0
Twice per week	13	9	4	0
Three to six times per week	25	22	3	0
Daily	29	28	0	1
Total	122	72	48	2

Activities on the Trails

Nominal Descriptive Statistics
Inclusion criteria: Active Trails from Trails Data Final

	# Levels	Count	# Missing	Mode
Commuting (17d)	2	554	2	2
Backpacking (17e)	2	554	2	2
Jogging (17c)	2	553	3	2
Biking (17b)	2	554	2	2
Walking/hiking (17a)	2	554	2	1
ATV (17f)	1	554	2	1
Fishing (17g)	2	554	2	2
Photography (17h)	2	554	2	2
Painting (17i)	2	554	2	2
Picnicking (17j)	2	554	2	2
Bird watching (17k)	2	554	2	2
Wildlife viewing (17l)	2	554	2	2
Nature study (17m)	2	554	2	2
Other (17 n)	1	61	495	1
Walking/hiking (18a)	2	407	149	1
Biking(18b)	2	208	348	1
Jogging(18c)	2	141	415	2
Commuting(18d)	2	113	443	2
Backpacking(18e)	2	136	420	2
ATV(18f)	2	116	440	2
Fishing(18g)	2	127	429	2
Snowshoeing (18h)	2	121	435	2
Snowmobiling (18i)	2	119	437	2
X-country skiing (18j)	2	193	363	1
Horseback riding (18k)	2	119	437	2
Swimming (18l)	2	120	436	2
Photography (18m)	2	189	367	1
Painting (18n)	2	113	443	2
Picnicking (18o)	2	149	407	2
Bird watching (18p)	2	143	413	2
Wildlife viewing (18q)	2	145	411	2
Nature study (18r)	2	142	414	2
Other (18s)	1	29	527	1

Activities on the Trail Today

Frequency Distribution for Walking/hiking (17a)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	546	86	194	266
No	8	3	4	1
Total	554	89	198	267

Frequency Distribution for Biking (17b)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	16	6	9	1
No	538	83	189	266
Total	554	89	198	267

Frequency Distribution for Jogging (17c)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	10	6	2	2
No	543	83	196	264
Total	553	89	198	266

Frequency Distribution for Commuting (17d)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	2	2	0	0
No	552	87	198	267
Total	554	89	198	267

Frequency Distribution for Backpacking (17e)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	17	0	16	1
No	537	89	182	266
Total	554	89	198	267

Frequency Distribution for ATV (17f)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
No	554	89	198	267
Total	554	89	198	267

Frequency Distribution for Fishing (17g)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	1	0	0	1
No	553	89	198	266
Total	554	89	198	267

Frequency Distribution for Photography (17h)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	236	14	106	116
No	318	75	92	151
Total	554	89	198	267

Frequency Distribution for Painting (17i)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	3	0	2	1
No	551	89	196	266
Total	554	89	198	267

Frequency Distribution for Picnicking (17j)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	77	5	60	12
No	477	84	138	255
Total	554	89	198	267

Frequency Distribution for Bird watching (17k)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	188	36	75	77
No	366	53	123	190
Total	554	89	198	267

Frequency Distribution for Wildlife viewing (17l)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	217	40	80	97
No	337	49	118	170
Total	554	89	198	267

Frequency Distribution for Nature study (17m)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	171	35	44	92
No	383	54	154	175
Total	554	89	198	267

Frequency Distribution for Other (17 n)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	61	6	11	44
Total	61	6	11	44

Other Activities Generally Undertaken on Trails

Frequency Distribution for Walking/hiking (18a)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	380	44	118	218
No	27	3	12	12
Total	407	47	130	230

Frequency Distribution for Biking(18b)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	131	13	54	64
No	77	7	28	42
Total	208	20	82	106

Frequency Distribution for Jogging(18c)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	39	6	12	21
No	102	9	36	57
Total	141	15	48	78

Frequency Distribution for Commuting(18d)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	2	0	1	1
No	111	12	39	60
Total	113	12	40	61

Frequency Distribution for Backpacking(18e)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	38	1	18	19
No	98	11	35	52
Total	136	12	53	71

Frequency Distribution for ATV(18f)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	7	0	4	3
No	109	12	36	61
Total	116	12	40	64

Frequency Distribution for Fishing(18g)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	21	2	2	17
No	106	11	39	56
Total	127	13	41	73

Frequency Distribution for Snowshoeing (18h)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	16	1	6	9
No	105	11	37	57
Total	121	12	43	66

Frequency Distribution for Snowmobiling (18i)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	10	0	4	6
No	109	12	38	59
Total	119	12	42	65

Frequency Distribution for X-country skiing (18j)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	111	5	45	61
No	82	8	28	46
Total	193	13	73	107

Frequency Distribution for Horseback riding (18k)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	9	0	3	6
No	110	12	38	60
Total	119	12	41	66

Frequency Distribution for Swimming (18l)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	14	0	6	8
No	106	12	38	56
Total	120	12	44	64

Frequency Distribution for Photography (18m)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	111	8	43	60
No	78	9	30	39
Total	189	17	73	99

Frequency Distribution for Painting (18n)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	4	0	0	4
No	109	12	39	58
Total	113	12	39	62

Frequency Distribution for Picnicking (18o)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	58	4	32	22
No	91	11	32	48
Total	149	15	64	70

Frequency Distribution for Bird watching (18p)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	62	4	21	37
No	81	9	30	42
Total	143	13	51	79

Frequency Distribution for Wildlife viewing (18q)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	71	5	22	44
No	74	9	31	34
Total	145	14	53	78

Frequency Distribution for Nature study (18r)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	56	3	12	41
No	86	10	33	43
Total	142	13	45	84

Frequency Distribution for Other (18s)
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Yes	29	3	10	16
Total	29	3	10	16

Trail Use Statistics

Descriptive Statistics

	Mean	Std. Error	Count	Minimum	Maximum	5% Tr. Mean
Interview Duration	14.5	.3	377	5.0	45.0	14.0
Frequency of trail use, last 12 months (Q4)	34.0	3.9	539	0.0	730.0	17.4
Number of different NS trails used last 12 mont...	3.3	.2	524	0.0	40.0	2.7
Frequncy of trail use outside Nova Scotia (Q6)	27.4	3.9	373	0.0	600.0	12.2
Time spent on trail today? (Q14)	2.0	.2	556	.2	48.0	1.6
Times used trail in last 12 months? (Q15)	42.2	6.3	323	0.0	730.0	24.4
Non-residents, influence of system of hiking trai...	4.0	.2	333	0.0	10.0	3.9
Residents, influence of system of hiking trails? ...	5.2	.4	108	0.0	10.0	5.2
Influence of particular trail on choice of destinat...	4.4	.2	438	0.0	10.0	4.4

Frequency Distribution for Non-residents, influence of system of hiking trails? (9a)
Split By: Trail Type

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	113	2	26	85
1	2	14	0	3	11
2	3	20	0	3	17
3	4	8	0	2	6
4	5	9	0	2	7
5	6	41	0	13	28
6	7	21	1	5	15
7	8	36	0	18	18
8	9	38	1	13	24
9	10	5	0	1	4
10	11	28	0	12	16
	Total	333	4	98	231

Frequency Distribution for Residents, influence of system of hiking trails? (9b)
Split By: Trail Type

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	35	0	16	19
1	2	2	0	1	1
2	3	3	0	3	0
3	4	3	1	2	0
4	5	2	0	2	0
5	6	7	0	5	2
6	7	5	0	3	2
7	8	7	0	7	0
8	9	6	0	3	3
9	10	6	0	4	2
10	11	32	0	26	6
	Total	108	1	72	35

Frequency Distribution for Influence of particular trail on choice of destination? (Q10)
Split By: Trail Type

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	165	2	17	146
1	2	11	0	2	9
2	3	15	0	4	11
3	4	11	0	5	6
4	5	8	0	2	6
5	6	36	0	17	19
6	7	24	1	9	14
7	8	29	0	16	13
8	9	34	1	19	14
9	10	10	0	8	2
10	11	95	1	67	27
	Total	438	5	166	267

Frequency Distribution for Frequency of Nova Scotia trail use, last 12 months (Q4)
Split By: Trail Type
Inclusion criteria: Excluding Guysborough from Trails Data Oct. 22-TP

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	15	0	12	3
1	2	173	3	62	108
2	3	79	3	27	49
3	4	45	0	15	30
4	5	40	4	11	25
5	6	16	0	6	10
6	7	24	0	16	8
7	8	3	0	1	2
8	9	6	1	4	1
9	10	1	0	1	0
10	11	16	0	12	4
	Total	418	11	167	240

The intervals specified do not contain the entire range of the data.

Frequent users, such as those who walk once or twice a day on trails, an urban trail phenomenon, are excluded from this table.

Frequency Distribution for Number of different NS trails used last 12 months (Q5)
Split By: Trail Type

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	17	2	14	1
1	2	205	38	61	106
2	3	98	16	32	50
3	4	62	10	18	34
4	5	40	1	15	24
5	6	21	4	8	9
6	7	25	1	13	11
7	8	6	2	2	2
8	9	6	1	4	1
9	10	3	0	2	1
10	11	19	1	11	7
	Total	502	76	180	246

The intervals specified do not contain the entire range of the data.

Frequent users, such as those who walk once or twice a day on trails, an urban trail phenomenon, are excluded from this table.

Frequency Distribution for Frequncy of trail use outside Nova Scotia (Q6)
Split By: Trail Type

From (≥)	To (<)	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
0	1	76	26	18	32
1	2	31	7	13	11
2	3	26	3	5	18
3	4	23	1	14	8
4	5	20	1	5	14
5	6	18	0	11	7
6	7	24	2	11	11
7	8	4	0	3	1
8	9	2	0	1	1
9	10	2	0	2	0
10	11	21	0	3	18
	Total	247	40	86	121

The intervals specified do not contain the entire range of the data.

Frequent users, such as those who walk once or twice a day on trails, an urban trail phenomenon, are excluded from this table.

Trail Conditions

Nominal Descriptive Statistics
Inclusion criteria: Active Trails from Trails Data Final

	# Levels	Count	# Missing	Mode
Q23a, Trail maintenance	4	552	4	2
Q23b, Structures	4	550	6	2
Q23c, Hazards marked, trail safe	4	550	6	2
Q23d, Level trail surface	4	547	9	2
Q23e, Direction and distance markers on trail	3	550	6	1
Q23f, Interpretive information on trail	4	550	6	2
Q23g, Washrooms available	3	544	12	1
Q23h, Drinking water available	3	533	23	1
Q23i, Garbage cans	3	542	14	1
Q23j, Rest spots/picnic areas	4	538	18	2
Q23k, Scenic viewing areas	3	537	19	1
Q23l, Camping areas nearby	4	525	31	4
Q23m, Accommodations nearby	4	528	28	4
Q23n, Parking spaces	3	544	12	1
Q23o, Trail information brochure	3	536	20	1
Q23p, Trailhead well identified on road	3	538	18	1
Q23q, Other	3	14	542	•
Q25a, More information on specific trails	6	528	28	4
Q25b, More signs along road	5	526	30	3
Q25c, Existing trails upgraded/improved	6	525	31	3
Q25d, More day use trails	6	524	32	4
Q25e, More wilderness trails constructed	6	522	34	3
Q25f, More interpretive information on trails	6	525	31	3
Q25g, More rest spots , picnic areas	6	525	31	3
Q25h, More ocean views	5	525	31	3
Q25i, More scenic viewing areas	6	523	33	4
Q29a, Motorized off-roads vehicles share trail …	5	531	25	1
Q29b, More trails designated for hikers/walkers	5	530	26	5
Q29c, More trails for motorized off-road vehicles	5	527	29	3
Q29d, More trails for horse riders	5	524	32	3
Q29e, I avoid trails with motorized off-road ve…	5	532	24	5
Q29f, I avoid trails with bicycles	5	529	27	2

Frequency Distribution for Q23a, Trail maintenance
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	3	0	2	1
Same	498	74	175	249
More	50	15	19	16
No Opinion	1	0	1	0
Total	552	89	197	266

Frequency Distribution for Q23b, Structures
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	4	0	3	1
Same	481	70	158	253
More	42	5	25	12
No Opinion	23	14	9	0
Total	550	89	195	266

Frequency Distribution for Q23c, Hazards marked, trail safe
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	3	0	0	3
Same	501	82	173	246
More	39	5	22	12
No Opinion	7	2	1	4
Total	550	89	196	265

Frequency Distribution for Q23d, Level trail surface
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	4	1	1	2
Same	511	84	181	246
More	29	4	10	15
No Opinion	3	0	3	0
Total	547	89	195	263

Frequency Distribution for Q23e, Direction and distance markers on trail
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	356	48	93	215
More	190	37	103	50
No Opinion	4	4	0	0
Total	550	89	196	265

Frequency Distribution for Q23f, Interpretive information on trail
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	2	0	1	1
Same	331	44	81	206
More	208	41	111	56
No Opinion	9	4	3	2
Total	550	89	196	265

Frequency Distribution for Q23g, Washrooms available
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	373	46	141	186
More	124	37	52	35
No Opinion	47	5	3	39
Total	544	88	196	260

Frequency Distribution for Q23h, Drinking water available
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	360	40	139	181
More	159	42	50	67
No Opinion	14	6	1	7
Total	533	88	190	255

Frequency Distribution for Q23i, Garbage cans
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	424	50	148	226
More	113	37	45	31
No Opinion	5	2	3	0
Total	542	89	196	257

Frequency Distribution for Q23j, Rest spots/picnic areas
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	2	1	1	0
Same	460	71	155	234
More	71	12	36	23
No Opinion	5	4	0	1
Total	538	88	192	258

Frequency Distribution for Q23k, Scenic viewing areas
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	485	78	161	246
More	39	5	27	7
No Opinion	13	5	5	3
Total	537	88	193	256

Frequency Distribution for Q23l, Camping areas nearby
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	1	1	0	0
Same	190	22	75	93
More	11	0	6	5
No Opinion	323	62	108	153
Total	525	85	189	251

Frequency Distribution for Q23m, Accommodations nearby
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Less	1	1	0	0
Same	226	21	75	130
More	3	0	1	2
No Opinion	298	63	111	124
Total	528	85	187	256

Frequency Distribution for Q23n, Parking spaces
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	453	54	160	239
More	54	9	31	14
No Opinion	37	24	4	9
Total	544	87	195	262

Frequency Distribution for Q23o, Trail information brochure
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	355	51	108	196
More	134	17	78	39
No Opinion	47	17	8	22
Total	536	85	194	257

Frequency Distribution for Q23p, Trailhead well identified on road
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	388	58	117	213
More	134	20	72	42
No Opinion	16	10	3	3
Total	538	88	192	258

Frequency Distribution for Q23q, Other
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Same	4	1	3	0
More	5	4	1	0
No Opinion	5	0	2	3
Total	14	5	6	3

Frequency Distribution for Q25a, More information on specific trails
Spiit By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	1	0	1	0
Use somewhat less	3	0	1	2
Use about the same	126	19	36	71
Use somewhat more	250	49	83	118
Use a great deal more	101	8	60	33
No opinion	47	13	11	23
Total	528	89	192	247

Frequency Distribution for Q25b, More signs along road
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use somewhat less	3	0	2	1
Use about the same	142	11	31	100
Use somewhat more	189	40	71	78
Use a great deal more	147	26	78	43
No opinion	45	12	10	23
Total	526	89	192	245

Frequency Distribution for Q25c, Existing trails upgraded/improved
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	2	0	1	1
Use somewhat less	10	0	8	2
Use about the same	239	24	98	117
Use somewhat more	112	33	30	49
Use a great deal more	60	18	26	16
No opinion	102	14	29	59
Total	525	89	192	244

Frequency Distribution for Q25d, More day use trails
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	1	0	1	0
Use somewhat less	4	0	2	2
Use about the same	122	14	37	71
Use somewhat more	210	33	80	97
Use a great deal more	118	26	56	36
No opinion	69	16	16	37
Total	524	89	192	243

Frequency Distribution for Q25e, More wilderness trails constructed
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	4	1	3	0
Use somewhat less	12	0	3	9
Use about the same	174	12	71	91
Use somewhat more	113	31	38	44
Use a great deal more	89	20	48	21
No opinion	130	24	28	78
Total	522	88	191	243

Frequency Distribution for Q25f, More interpretive information on trails
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	1	0	1	0
Use somewhat less	5	0	3	2
Use about the same	200	21	79	100
Use somewhat more	173	36	60	77
Use a great deal more	98	18	38	42
No opinion	48	14	10	24
Total	525	89	191	245

Frequency Distribution for Q25g, More rest spots , picnic areas
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	4	0	4	0
Use somewhat less	9	0	6	3
Use about the same	265	23	108	134
Use somewhat more	154	40	48	66
Use a great deal more	41	13	15	13
No opinion	52	13	11	28
Total	525	89	192	244

Frequency Distribution for Q25h, More ocean views
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use somewhat less	4	1	1	2
Use about the same	152	16	54	82
Use somewhat more	190	41	66	83
Use a great deal more	126	17	59	50
No opinion	53	14	12	27
Total	525	89	192	244

Frequency Distribution for Q25i, More scenic viewing areas
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Use a great deal less	1	0	1	0
Use somewhat less	3	1	1	1
Use about the same	168	14	64	90
Use somewhat more	188	43	62	83
Use a great deal more	109	17	50	42
No opinion	54	14	13	27
Total	523	89	191	243

Frequency Distribution for Q29a, Motorized off-roads vehicles share trail with users on foot
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	425	67	148	210
Somewhat disagree	41	9	14	18
No opinion	32	4	10	18
Somewhat agree	12	4	4	4
Strongly agree	21	4	14	3
Total	531	88	190	253

Frequency Distribution for Q29b, More trails designated for hikers/walkers
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	14	3	5	6
Somewhat disagree	26	5	8	13
No opinion	132	12	45	75
Somewhat agree	105	22	44	39
Strongly agree	253	46	88	119
Total	530	88	190	252

Frequency Distribution for Q29c, More trails for motorized off-road vehicles
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	148	13	58	77
Somewhat disagree	44	6	14	24
No opinion	184	19	61	104
Somewhat agree	86	27	37	22
Strongly agree	65	23	18	24
Total	527	88	188	251

Frequency Distribution for Q29d, More trails for horse riders
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	16	1	8	7
Somewhat disagree	34	11	6	17
No opinion	293	38	114	141
Somewhat agree	111	21	38	52
Strongly agree	70	17	19	34
Total	524	88	185	251

Frequency Distribution for Q29e, I avoid trails with motorized off-road vehicles
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	32	7	17	8
Somewhat disagree	34	7	6	21
No opinion	52	9	22	21
Somewhat agree	55	5	18	32
Strongly agree	359	60	127	172
Total	532	88	190	254

Frequency Distribution for Q29f, I avoid trails with bicycles
Split By: Trail Type
Inclusion criteria: Active Trails from Trails Data Final

	Total Count	Urban Count	Hiking/Walking Count	Tourist Count
Strongly disagree	137	36	55	46
Somewhat disagree	140	22	46	72
No opinion	80	10	34	36
Somewhat agree	86	10	26	50
Strongly agree	86	9	28	49
Total	529	87	189	253

Nova Scotian Spending by Trail Type

Spending by Nova Scotians beyond a 30-minute drive of the trail

Descriptive Statistics
Split By: Trail Type
Inclusion criteria: Nova Scotians,
Live > 30 minutes, travel more than 80 km from Trails Data Final

	Mean	Std. Error	Count	Median
Total Spending (beyond 30 minutes), Total	127.2	30.3	98	10.0
Total Spending (beyond 30 minutes), Urban	0.0	•	1	0.0
Total Spending (beyond 30 minutes), Hiking/Walking	97.7	41.1	65	0.0
Total Spending (beyond 30 minutes), Tourist	191.1	38.9	32	112.5

Spending by Nova Scotians within a 30-minute drive of the trail

Descriptive Statistics
Split By: Trail Type
Inclusion criteria: Nova Scotians,
Live > 30 minutes, travel more than 80 km from Trails Data Final

	Mean	Std. Error	Count	Median
Total Spending (within 30 minutes), Total	81.3	14.2	98	27.0
Total Spending (within 30 minutes), Urban	350.0	•	1	350.0
Total Spending (within 30 minutes), Hiking/Walking	66.3	16.7	65	13.0
Total Spending (within 30 minutes), Tourist	103.4	25.6	32	55.8

Nova Scotian Spending

Spending by Nova Scotians beyond a 30-minute drive of the trail

Descriptive Statistics
Inclusion criteria: Nova Scotians
Live > 30 minutes, travel more than 80 km from Trail Data Final

	Mean	Std. Error	Count	Minimum	Maximum	10% Tr. Mean
Q22, Fixed Roof	36.1	17.5	98	0.0	1600.0	2.1
Q22, Campgrounds	9.2	4.4	98	0.0	400.0	.5
Q22, Meals,beverages	28.1	6.4	98	0.0	300.0	11.3
Q22, Ferry	0.0	0.0	98	0.0	0.0	0.0
Q22, Auto gas, repair	24.5	7.8	98	0.0	700.0	10.3
Q22, Taxis	0.0	0.0	98	0.0	0.0	0.0
Q22, Groceries,liquor	20.9	6.7	98	0.0	500.0	4.6
Q22, Other shopping	6.1	2.5	98	0.0	200.0	.3
Q22, Recreation	2.2	1.3	98	0.0	100.0	0.0
Q22, Package travel	0.0	0.0	98	0.0	0.0	0.0
Q22, Other	0.0	0.0	98	0.0	0.0	0.0
Total Spending (beyo...	127.2	30.3	98	0.0	2100.0	57.5

Spending by Nova Scotians within a 30-minute drive of the trail

Descriptive Statistics
Inclusion criteria: Nova Scotians,
Live > 30 minutes, travel more than 80 km from Trails Data Final

	Mean	Std. Error	Count	Minimum	Maximum	10% Tr. Mean
Q21, Fixed Roof	22.8	6.3	98	0.0	400.0	6.7
Q21, Campground	10.8	3.1	98	0.0	210.0	3.2
Q21, Meals	18.9	4.1	98	0.0	200.0	8.6
Q21, Ferry/Air Fares	.3	.3	98	0.0	25.0	0.0
Q21, Auto gas	8.6	1.5	98	0.0	80.0	5.7
Q21, Taxi/car rental	0.0	0.0	98	0.0	0.0	0.0
Q21, Groceries,liquor	9.3	3.5	98	0.0	300.0	2.2
Q21, Other shopping	3.1	1.3	98	0.0	100.0	.1
Q21, Recreation	6.3	4.0	98	0.0	362.0	0.0
Q21, Package travel	0.0	0.0	98	0.0	0.0	0.0
Q21, Other	1.2	.5	98	0.0	40.0	0.0
Total Spending (withi...	81.3	14.2	98	0.0	700.0	48.6

Descriptive Statistics
Split By: Trail
Inclusion criteria: Nova Scotians, Live > 30 minutes, travel more than 80 km from Trails Data Final

	Mean	Std. Error	Count	Minimum	Maximum
Total Spending (within 30 minutes), Total	81.3	14.2	98	0.0	700.0
Total Spending (within 30 minutes), CS Cape Split	58.8	38.3	18	0.0	667.0
Total Spending (within 30 minutes), BPP Blomidon Provincial park	80.7	25.3	21	0.0	388.0
Total Spending (within 30 minutes), DUT Dartmouth Urban Trail	350.0	•	1	350.0	350.0
Total Spending (within 30 minutes), TBRT Tiverton Balancing Rock Trail	19.0	15.6	3	0.0	50.0
Total Spending (within 30 minutes), KSA Kejimkujik Seaside Adjunct	63.1	37.7	16	0.0	610.0
Total Spending (within 30 minutes), CCPP Cape Chignecto Provincial P…	54.5	31.2	10	0.0	327.0
Total Spending (within 30 minutes), MT Middlehead Trail	166.3	48.0	15	0.0	700.0
Total Spending (within 30 minutes), BT Bog Trail	54.1	16.4	14	0.0	185.0
Total Spending (beyond 30 minutes), Total	127.2	30.3	98	0.0	2100.0
Total Spending (beyond 30 minutes), CS Cape Split	38.4	30.3	18	0.0	550.0
Total Spending (beyond 30 minutes), BPP Blomidon Provincial park	99.0	70.7	21	0.0	1500.0
Total Spending (beyond 30 minutes), DUT Dartmouth Urban Trail	0.0	•	1	0.0	0.0
Total Spending (beyond 30 minutes), TBRT Tiverton Balancing Rock Trail	153.3	65.7	3	60.0	280.0
Total Spending (beyond 30 minutes), KSA Kejimkujik Seaside Adjunct	217.2	133.6	16	0.0	2100.0
Total Spending (beyond 30 minutes), CCPP Cape Chignecto Provincial…	10.2	8.2	10	0.0	82.0
Total Spending (beyond 30 minutes), MT Middlehead Trail	141.2	38.4	15	0.0	490.0
Total Spending (beyond 30 minutes), BT Bog Trail	252.6	76.7	14	0.0	905.0

Non Nova Scotian Spending by Trail Type

Spending by Non Nova Scotians beyond a 30-minute drive of the trail

Descriptive Statistics
Split By: Trail Type
Inclusion criteria: Non Nova Scotians,
from Trails Data Final

	Mean	Std. Error	Count	Median
Total Spending (beyond 30 minutes), Total	1123.6	60.3	332	890.0
Total Spending (beyond 30 minutes), Urban	183.8	138.9	4	52.5
Total Spending (beyond 30 minutes), Hiking/Wa...	876.2	104.0	97	505.0
Total Spending (beyond 30 minutes), Tourist	1243.8	73.3	231	1000.0

Spending by Non Nova Scotians within a 30-minute drive of the trail

Descriptive Statistics
Split By: Trail Type
Inclusion criteria: Non Nova Scotians,
from Trails Data Final

	Mean	Std. Error	Count	Median
Total Spending (within 30 minutes), Total	92.1	13.7	332	9.0
Total Spending (within 30 minutes), Urban	621.0	345.5	4	492.0
Total Spending (within 30 minutes), Hiking/Wa...	102.0	28.1	97	14.0
Total Spending (within 30 minutes), Tourist	78.8	14.3	231	5.0

Non Nova Scotian Spending

Spending by Non-Nova Scotians beyond a 30-minute drive of the trail

Descriptive Statistics
Inclusion criteria: Non-Nova Scotians from Trails Data Final

	Mean	Std. Error	Count	Minimum	Maximum	10% Tr. Mean
Q22, Fixed Roof	388.3	25.9	332	0.0	3000.0	308.1
Q22, Campgrounds	35.7	5.1	332	0.0	800.0	12.7
Q22, Meals,beverages	260.8	17.9	332	0.0	2000.0	196.8
Q22, Ferry	76.2	16.4	332	0.0	3000.0	6.4
Q22, Auto gas, repairs	106.8	10.6	332	0.0	2800.0	76.9
Q22, Taxis	80.0	13.1	332	0.0	2000.0	16.0
Q22, Groceries,liquor	59.0	6.2	332	0.0	1000.0	34.0
Q22, Other shopping	60.8	5.9	332	0.0	600.0	36.6
Q22, Recreation	35.7	9.8	332	0.0	3000.0	10.9
Q22, Package travel	20.1	15.1	332	0.0	4545.0	0.0
Q22, Other	.3	.2	332	0.0	50.0	0.0
Total Spending (beyo...	1123.6	60.3	332	0.0	6450.0	938.6

Spending by Non-Nova Scotians within a 30-minute drive of the trail

Descriptive Statistics
Inclusion criteria: Non-Nova Scotian spend within 30 minute drive

	Mean	Std. Error	Count	Minimum	Maximum	10% Tr. Mean
Q21, Fixed Roof	49.4	10.0	332	0.0	1500.0	7.7
Q21, Campground	2.6	.6	332	0.0	90.0	0.0
Q21, Meals	23.4	4.3	332	0.0	800.0	5.7
Q21, Ferry/Air Fares	3.5	1.7	332	0.0	500.0	0.0
Q21, Auto gas	2.6	.6	332	0.0	100.0	0.0
Q21, Taxi/car rental	0.0	0.0	332	0.0	0.0	0.0
Q21, Groceries,liquor	2.8	.8	332	0.0	200.0	3.8E-3
Q21, Other shopping	5.7	1.5	332	0.0	300.0	0.0
Q21, Recreation	1.4	.5	332	0.0	100.0	0.0
Q21, Package travel	0.0	0.0	332	0.0	0.0	0.0
Q21, Other	.7	.3	332	0.0	60.0	0.0
Total Spending (withi...	92.1	13.7	332	0.0	2425.0	31.6

Non Nova Scotian Spending

Total Spending by Trail

Descriptive Statistics
Split By: Trail
Inclusion criteria: Non-Nova Scotians from Trails Data Final

	Mean	Std. Error	Count	Minimum	Maximum
Total Spending (within 30 minutes), Total	92.1	13.7	332	0.0	2425.0
Total Spending (within 30 minutes), CS Cape Split	58.6	19.6	26	0.0	360.0
Total Spending (within 30 minutes), BPP Blomidon Provincial park	50.0	35.2	6	0.0	210.0
Total Spending (within 30 minutes), DUT Dartmouth Urban Trail	72.5	72.5	2	0.0	145.0
Total Spending (within 30 minutes), LBHT Lunenburg Back Harbour Trail	1169.5	330.5	2	839.0	1500.0
Total Spending (within 30 minutes), TBRT Tiverton Balancing Rock Trail	36.3	10.7	66	0.0	594.0
Total Spending (within 30 minutes), KSA Kejimkujik Seaside Adjunct	132.9	48.2	54	0.0	2425.0
Total Spending (within 30 minutes), CCPP Cape Chignecto Provincial Park	81.2	50.4	11	0.0	560.0
Total Spending (within 30 minutes), MT Middlehead Trail	194.3	43.9	68	0.0	1526.0
Total Spending (within 30 minutes), BT Bog Trail	26.8	5.2	97	0.0	300.0
Total Spending (beyond 30 minutes), Total	1123.6	60.3	332	0.0	6450.0
Total Spending (beyond 30 minutes), CS Cape Split	923.4	168.9	26	0.0	3300.0
Total Spending (beyond 30 minutes), BPP Blomidon Provincial park	1950.0	713.6	6	130.0	4750.0
Total Spending (beyond 30 minutes), DUT Dartmouth Urban Trail	45.0	15.0	2	30.0	60.0
Total Spending (beyond 30 minutes), LBHT Lunenburg Back Harbour Trail	322.5	277.5	2	45.0	600.0
Total Spending (beyond 30 minutes), TBRT Tiverton Balancing Rock Trail	880.3	122.9	66	0.0	5150.0
Total Spending (beyond 30 minutes), KSA Kejimkujik Seaside Adjunct	812.7	139.3	54	0.0	4760.0
Total Spending (beyond 30 minutes), CCPP Cape Chignecto Provincial Park	490.2	150.6	11	0.0	1274.0
Total Spending (beyond 30 minutes), MT Middlehead Trail	1373.7	150.1	68	0.0	6450.0
Total Spending (beyond 30 minutes), BT Bog Trail	1400.1	106.7	97	17.0	5310.0

Appendix E

Interviewer Procedure Manual

Trail Orientation

Before surveying on a study trail for the first time, interviewers walked either the whole study trail or a part of it to familiarize themselves with the trail features and characteristics. This was done to ensure that the interviewers understood comments from respondents and they could respond to any questions the respondents may have had about the trails. In a study that continued for a longer duration or across more seasons, it would be worthwhile for the interviewers to walk the trail again to observe changes in trail conditions.

Selecting Site for Interviewing and Counting

A specific interviewing and counting site was selected by the interview team at the beginning of the project to ensure consistency in the counting data and interviewing process. Interviewers were instructed to interview only those trail users exiting the trails as only those users would be able to provide perceptions of the trail and its features. On single access trails, the trailhead was the logical site for interviewing, as trail users had to exit from the same place they entered the trail. On multi-access trails, the access point that appeared to be the most used or advertised was selected.

Attempting to interview trail users as they headed for their cars after their hike presented some problems, as people were often anxious to be on their way especially if children were waiting in the car. This was less of a problem on trails that had washrooms or other facilities at their trailheads which offered other group or family members something to do while interviews were conducted. Interviewers tried to offer trail users shade from the sun or shelter from the rain as required. Another consideration was bugs and flies in which case the interviewers tried to pick an interview spot which was more in the open and subject to breezes.

The Tiverton Trail had a unique problem in that trail users were often rushing to catch the next ferry off Long Island. One way to deal with this constraint was for the interviewers to have information available on the ferries' schedules and to know when the ferries were running on a run as they fill basis. In this way, people would know if the interview would result in waiting time for the ferries.

On some of the multi-access trails with repeat visitors such as the Dartmouth Urban Trail and the Lunenburg Back Harbour Trail, the interviewers sometimes walked the trails looking for repeat trail users to interview. In those cases, the trail users could be interviewed mid-hike because they had prior knowledge of the trails. The site selected for interviewing on the Dartmouth Urban Trail was chosen for its proximity to the campground where tourists could be staying. However, it was mid-trail for many users that made them reluctant to stop. In light of the fact that there were very few tourists interviewed at this site, a better interviewing location would be at the MicMac Mall entrance to the trail.

Timing of Surveys

Interviewers were allocated surveying days on the study trails on a random basis so they interviewed trail users on both weekdays and weekends. However, the original surveying schedule was modified part way through the summer because of the travel ban and this changed the weekday/weekend allocations of sample days on some trails. To get trail user counts at different times of the hiking day (from 9 am to 8 pm), interviewers were asked to survey in the afternoon and early evening on the first day that they visited the trail and then survey in the morning and early afternoon on the second day of their visit to the trail. The driving time to and from the trails determined the length of each survey day, but it averaged 5 to 6 hours.

Selecting Respondents

Interviewers were asked to interview trail users on a "catch-as-can-catch" basis. This meant when not interviewing, they were expected to approach each group exiting the study trail. While some groups of trail users such as bikers and joggers proved to be less likely to participate in the survey, they were approached just the same. Interviewers told the potential respondents about the purpose of the study, the sponsors of the study, and the average time required for an interview (10 to 15 minutes). If trail users refused to participate in the survey, the interviewers thanked them anyway and told them they hoped that they enjoyed the trail. If a group of trail users agreed to be interviewed, one respondent was selected by asking the group to identify the person in the group with the most recent birthday.

Interviewing Procedure

Trail users in the national parks who were French-speaking were asked at the beginning of the survey whether they preferred to do the interview in French. The interviewer then executed the survey in the language of choice.

If the trail users indicated either verbally or through body language that they were getting impatient with the length of the survey, the interviewers told the respondent how many questions were left to be answered in the survey. In a few cases, where respondents indicated they did not have time to finish the questions, the interviewers skipped to the last page of the survey to get demographic information and the name and number from the respondent.

At the end of each interview, the interviewer thanked the respondents for participating in the survey and handed them a thank-you note that provided a contact address in case they wanted more information about the project. The interviewer then quickly reviewed each completed survey to check for ambiguities and items left incomplete. It also shortened the interview time to jot ideas down that could be expanded more fully after the interview.

Managing and Storing Surveys

Interviewers were reminded that the completed surveys were original documents that required careful storage until they were brought back to the office. Once the surveys were returned to the office, they were numbered and photocopied immediately. The original surveys were then stored off-site, while the photocopies were used for data processing.

Manual Counting

Interviewers were instructed to count the total number of trail users who passed the trail at the interviewing site using either an hourly counting sheet or a hand-held tally counter. If the study trail was not very busy, interviewers while surveying recorded more detailed counting information including the direction of travel (entering or exiting the trail), the mode of travel (walking, biking, ATV), and the duration of the trail visit (day use or overnight use). Manual Count sheets (see page E-6) were provided for this purpose. If the study trail was busy, interviewers instead stopped interviewing for an hour and recorded this detailed counting information for that time period on the same sheets.

Setting Up and Operating the Infrared Beam Counters

Interviewers were given instructions on how to operate the infrared beam counters and practiced setting the devices up and recording information from them before using them in the field. The date and sensitivity settings for each counter were entered only once at the beginning of the study. A sensitivity setting of P3 was selected to attempt to count faster moving trail users such as joggers and bikers, but not count small interferences in the beam from such things as falling rain or leaves. At this setting, the beam had to be broken for 0.15 seconds to be counted as an event. An instruction manual for each counter was also given to each interviewer to carry with them for extra reference. Appropriate trees for mounting the devices were selected and used throughout the study period to maintain consistency in the data.

Interviewers were told to follow the setting up instructions on page 10 of the instruction manual. This involved the following simple steps.

- Attach the transmitter loosely to a tree on one side of the trail. Switch it on.
- Attach the receiver loosely to a tree on the opposite side of the trail. Switch it on.
- Press the set up button on the receiver until it says "SUP" in the window.
- Line up the two devices using the sight line on the receiver. When the beam is lined up, the red light on the receiver flashes. (Follow the detailed directions on page 10 of the instruction manual to line up the devices so the receiver window is aligned as closely as possible with the centre of the transmitted beam.)

- Tighten both the transmitter and receiver to their trees.
- Press the start button to begin counting.

At the end of the day, interviewers were instructed to retrieve the times of each event or count, using the Read Out (R/O Advance) button of the receiver. This data was manually recorded onto Data Information Sheets. The interviewer then cleared the receiver so it was ready to begin counting at 0 again.

Data Information Sheets

Interviewers recorded both their manual counts and infrared beam counts on Data Information Sheets (see page E-7). The manual counts on these sheets include the total number of trail users entering and exiting the trail since the infrared counters automatically recorded users travelling in both directions. Comparing the hourly manual counts and infrared counter counts provided a measure of the accuracy of the infrared counters.

Manual Count Summary

Location: ______________________________

Date: ______________________________

Time: ______________________________

Weather: ______________________________

Time	Direction		Group Size		Type of Users		Duration of Use		Surveyed/ Refused
	In	Out	Adult	Children	Walker/ Hiker	Other (specify)	Day Use	Overnight	(S or R)

DATA INFORMATION SHEET

Location: ____________________
Surveyor: ____________________
Weather Conditions: ____________________
Date: ____________________

Hour	Number Through Beam (Cumulative)	Number Through Beam (hourly)	Manual Count	Number Surveyed	Number of Refusals

Additional Comments: ____________________

Appendix F

Customized Survey Manual

Modifying the Survey

The survey instrument used in this study was modified for use on a single trail in Appendix G. Although it is shorter than the study survey, it is still a long survey to administer. It consists of three main parts:

- Part A - Trail User Characteristics
- Part B - Expenses
- Part C - Perceptions of Trail

Questions 25 and 26 in Part C are actually questions about trail user characteristics (education and income) but they were placed at the end of the survey because of their sensitive and private nature. Interviewers may feel more comfortable having respondents check off the boxes for these questions themselves. Asking respondents to also write their name and phone numbers on the last page of the survey also is easier and reduces the chances of error in recording this information accurately.

Community groups may prefer to mix and match questions from this modified version to create a more focused survey. For example, if a community group was mostly interested in profiling trail user characteristics, they might design a survey that includes only Part A (Trail User Characteristics) of the modified survey, plus questions 25 and 26. If a regional development association was interested only in the economic impact of the trail, they might design a survey that includes only Part A (Trail User Characteristics) and Part B (Expenses), plus questions 25 and 26. A trail association that was trying to decide if they should add improvements to a trail or that was considering restricting certain types of users from a trail could include only Part C (Perceptions of Trail) minus questions 25 and 26 in their survey.

Lessons Learned about Surveys

Surveying instructions for interviewers used in this study are described in the Interviewer Procedure Manual in Appendix E. Additional lessons learned from surveying during the course of the study are listed below.

Length of Survey

The survey was too long. Many respondents verbally noted that the survey was long while others indicated this through body language. The survey modified for single trail use is shorter, and could be even more narrowly focused as discussed above.

Reaching Joggers and Cyclists

It was difficult to get joggers and bikers to stop to participate in the survey on some trails. Some trail users who were timing their walks also did not want to stop. To avoid this problem, the site selected for interviewing should be the access point where most trail users are exiting the trail. A stop sign on the back of the interviewer's clipboard could also be used to get the attention of bikers travelling quickly by interviewers.

Selecting Respondents

Asking the person in the group with the most recent birthday to be the respondent of the survey worked better with large groups rather than with couples. This question must be asked soon after the group agrees to participate in the interview, before group members delegate the task themselves. Group members often discussed the answers among themselves, lengthening the time required for the interview. During the interview process, the interviewers had to re-direct each question to the selected respondent if other group members offered their own answers. When more than one person gave an answer to a question such as the education or income question, the higher answer was selected for computer inputting. Interviewers should be reminded that they should approach all groups exiting the trail, no matter what language the group members are speaking, and they need to record the age and sex of the selected respondent in Question 16 of the survey by circling the appropriate category.

Expense Questions

Respondents sometimes had difficulties estimating their expenses especially if they were on a long or unstructured trip. Adding a question about the number of nights that they plan to spend on their trip in Nova Scotia (or away from home in Nova Scotia, in the case of N.S. residents) would enable researchers to use average tourist spending data available from Visitor Exit surveys to either compare to estimates of spending provided or substitute for incomplete data.

Respondents unfamiliar with the local area surrounding a trail were sometimes unsure whether places they spent money or intended to spend money in were within a 30-minute drive of the trail. To alleviate this problem, a map could be prepared showing this demarcation.

Knowledge Base of Interviewer

The most positive interview experiences resulted from interviews in which there was a two way sharing of information between the respondent and the interviewer. Some respondents were keen to receive information about the local area or other trails in the province, while others wanted to talk about trail experiences in their home province or state. While this type of interaction lengthened the interview experience, it was mutually more satisfying for both parties involved. It is important then for interviewers to have a good general knowledge of the local area (things to do, places to eat and stay etc.), and to be familiar with other trails in the province, or at least be able to direct respondents to places where they could obtain this information.

Thanking Respondents for Participating in Survey

Providing respondents with thank you notes after the interviews brought the interview to an end and reassured respondents that the survey was done for a legitimate purpose. A contact address should be included in case the respondents have any questions about the trail research being conducted.

To encourage trail users to participate in a survey and also give their name and phone number, community groups may consider having a raffle for respondents to win either a hiking book in Nova Scotia or a day pack or some other trail-oriented prize.

Lessons Learned about Counting

Counting instructions used in this study are described in the Interviewer Procedure Manual in Appendix E. Additional lessons learned about counting trail users during the course of the study are listed below.

Manually Counting Users

To avoid the problem of double-counting trail users, it is recommended that community groups do a pure count of entire hiking days. A pure count could be easily completed with two interviewers each counting for half a day.

If it is not possible to count trail users for whole hiking days, manual counts will have to be based on sample periods of a certain number of hours. Depending on the length of the trail, these total counts actually double-count users who enter and exit the trail while the interviewer is there counting and this over-counting must be factored in when calculating trail usage. On a short, the double-counting is higher than on a longer where people often spend much of the day on the trail.

Estimating Total Usage

It was difficult to estimate the total usage of a trail using sample counts that did not represent total daily counts as the double-counting factor had to be estimated for each trail. For this reason, it is recommended that 2 surveyors be used for half-day periods to get pure daily counts. The surveyors could then count both users entering and exiting the trail to get time of day use patterns, while either the number of people entering the trail or exiting the trail could be used to determine the daily count of users. Trails with multiple access points also pose a problem and would require the researchers to estimate the percentage of trail users which use the entrance selected for counting and interviewing to estimate total trail usage.

Counting days and times must be selected randomly to count trail users in all weather conditions and times of days, rather than just at peak times. This is necessary to get a more accurate picture of total use. If a significant difference in counts is observed between sunny and rainy days, this must be taken into account in grossing up total trail use from the sample days. Monthly climate or meteorological summaries for the closest climate station available from Environment Canada's Atlantic Climate Centre could be used to estimate the number of sunny and rainy days during the study period.

Infrared Counter Limitations

The infrared beam counters have a number of limitations listed below.

(i) Under-counting

On multi-use trails, the counters sometimes under-counted more because the trails were wider allowing more people to simultaneously cross the beam at the same time, and trail users jogging or biking crossed the beam too quick for them to register an event by breaking the beam.

(ii) Over-counting

The infrared beam counters also sometimes over-counted due to either a misalignment, movement of the trees on which they were mounted, direct sunlight triggering the receiver, or some other malfunctioning. Setting up the counters correctly was time-consuming as the beam had to be lined up accurately to avoid these misalignment problems. The accuracy of the counters turned out to be site-specific as some trails allowed for easier alignment of the devices. Some trails such as the Bog Trail were not well suited for infrared beam counter use because they did not have trees large enough to keep the two devices steady even in slight winds.

(iii) Prone to Tampering and Vandalism

The infrared beam counters should not be located in open view of trail users because there is a natural tendency for children to interfere with them either by walking back and forth through the beam or pressing their buttons. (One adult trail user actually took both parts of the infrared counter off of the trees they were mounted on and gave them to one interviewer.) If the infrared counters are placed further back off the trail, care must be taken to ensure no branches or leaves or other vegetation could interfere with the beam.

(iv) Battery Failure

The battery level of both devices also needs to be checked before use. Low battery levels are indicated by a low battery symbol that flashes on the screen of the receiver, and the red battery indicator light on the bottom of the transmitter either staying on or not flashing when the transmitter is turned on. Although the counter manual suggested the counter batteries would last for 3 months of continuous use, the batteries had to be replaced in one counter part way through the study.

Manual Counting Preferred Over Infrared Counters

For the above reasons, the infrared beam counters are only useful as a general indicator of whether or not a trail is being used. For more accurate counts, manual counting by personal observation is required.

Appendix G

Modified Survey

TRAIL USERS SURVEY

INTRODUCTION

Hello, my name is . We are conducting a survey of trail users for the [-------------Trail Association] to assist in the development and planning of this trail. Would you be willing to help us by answering some questions about your trail experience? It will only take 5 to 10 minutes of your time and all information you provide will be kept confidential.

Interviewer:
If answer is "NO", respond: Thank you for your time and we hope you enjoyed the trail.
If answer is "YES", and the respondent is ALONE, proceed with the questionnaire.
If answer is "YES", and the respondent is NOT ALONE, ask: Which member of your group (who is 15 years old or more) that you arrived with had the most recent birthday? **Proceed with the questionnaire with this person. Define "group" where necessary as people travelling together and sharing expenses.**

Interviewer: ______________________

Survey #: ______________________

Date (M/D): ______________________

Time: ______________________

Access Point: ______________________

Type of User: Walker/hiker ☐ 1
Biker/cyclist ☐ 2
ATV ☐ 3

Interviewer Notes:

PART A
Trail User Characteristics

First, I'd like to ask some questions about you (and your group) to assist in preparing a profile of trail users.

1. What is your permanent place of residence?
City/Town: ______________________
Province/State: ______________________
Other Country: ______________________

2. **Ask Nova Scotia residents only.** Are you going to be travelling more than 80 kilometres from your home or staying overnight on this trip? Yes ☐ No ☐

3. Which of the following best describes your trail use? **Read out. Check one only. If clarification is required, "trail" means hiking, walking, biking or ATV trails.**

• comfortable for less than an hour	☐	1
• comfortable for one or two hours	☐	2
• comfortable for two to four hours	☐	3
• comfortable for four hours to entire day	☐	4
• comfortable on an overnight backpacking trip	☐	5
• comfortable on a backpacking trip of more than one night	☐	6

4. How many *times* did you use a Nova Scotia trail in the last 12 months **(including this one)**? ______________________

5. How many *different* Nova Scotia trails did you use in the last 12 months **(including this one)**? ______________________

6. How many times did you use a trail outside of Nova Scotia in the last 12 months______

Now I'd like to ask some questions about your reasons for visiting this trail today.

7. What kind of experience were you seeking from this trail today? **Do not prompt. Check first four mentions.**

• mental/physical health benefits	☐	1	• develop skills	☐	7
• family outing	☐	2	• nature appreciation/study	☐	8
• be with people	☐	3	• pleasure/fun	☐	9
• solitude	☐	4	• challenge to abilities	☐	10
• experience wilderness	☐	5	• no single experience	☐	11
• explore new places	☐	6	• other (please specify)______________		12

8. Do you live within a 30 minute drive by car of this trail? Yes ☐ No ☐

If answer is "YES", go to question #10.
If answer is "NO", go to the next question.

9. How much influence, if any, would you say that this particular trail had in determining your visit to this area? This area is defined as the area within a 30 minute drive of this trail. Using this scale between 1 and 10 where 0 is no influence and 10 is that this trail is the main single reason for visiting this area, please choose any number between 0 and 10. **Show respondent the scale and mark one box only.**

no influence										single main reason
0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Trail Usage Characteristics

Now, I'd like to ask you some questions about your trail use.

10. How did you find out about the ____________ trail? **Do not prompt. Indicate all applicable choices.**

• word of mouth (friends/family/local person)	☐	1
• tourism information centre	☐	2
• signage/driving past	☐	3
• road map	☐	4
• brochure	☐	5
• newspaper or magazine story or advertisement	☐	6
• book	☐	7
• radio	☐	8
• TV advertisement	☐	9
• Internet	☐	10
• general knowledge (always knew/live here)	☐	11
• other (please specify)	☐	12

11. How much time did you spend on the ____________ trail today? **If in mid-hike, ask: How much time do you expect to spend on the trail today?**
- days ________
- hours ________

12. How many times did you use the _________trail in the last 12 months? ________

If the answer is 0, go to question #14.
If the answer is >0, go to the next question.

13. How often do you use the ________________ trail?

	16a Summer (June-Aug)	16b Fall (Sept.-Nov.)	16c Winter (Dec.-Feb.)	16d Spring (March-May)
• less than once per month	☐	☐	☐	☐
• once per month	☐	☐	☐	☐
• once per week	☐	☐	☐	☐
• twice per week	☐	☐	☐	☐
• 3-6 times per week	☐	☐	☐	☐
• daily	☐	☐	☐	☐

14. Could you please indicate with a "Yes" or "No" whether you did the following activities on the ____________ trail today: **Some of these can be checked by observation.**

	Yes	No		Yes	No
a. walking/hiking	☐	☐	h. photography	☐	☐
b. biking	☐	☐	i. painting	☐	☐
c. jogging	☐	☐	j. picnicking	☐	☐
d. commuting	☐	☐	k. bird watching	☐	☐
e. backpacking	☐	☐	l. wildlife viewing	☐	☐
f. ATV	☐	☐	m. nature study	☐	☐
g. fishing	☐	☐	n. other (please specify)________________		

15. Are there any other activities you undertake generally on trails? **Do not prompt but ask respondents to include winter activities. Check each activity mentioned.**

a. walking/hiking ☐
b biking ☐
c. jogging ☐
d. commuting ☐
e. backpacking ☐
f. ATV ☐
g. fishing ☐
h. snowshoeing ☐
i. snowmobiling ☐
j. X-country skiing ☐

k. horseback riding ☐
l. swimming ☐
m. photography ☐
n. painting ☐
o. picnicking ☐
p. birdwatching ☐
q. wildlife viewing ☐
r. nature study ☐
s. other (please specify)________________

16. Including yourself, how many males and females in your group fall into the following age categories? **Ask for ages of all group members and enter total in each category. Do not read every category. Circle the category in which the respondent falls to indicate the age and sex of the respondent. For clarification, the "group" includes all of the people travelling together and sharing expenses.**

	Male	**Female**		**Male**	**Female**
• 14 and under	______	______	• 45-54	______	______
• 15-19	______	______	• 55-64	______	______
• 20-24	______	______	• 65-74	______	______
• 25-34	______	______	• 75 and over	______	______
• 35-44	______	______			

PART B
Expenses

Now I'd like to ask you some questions about your spending on this trip. **Ask respondents to give their answers in Canadian dollars and to include taxes. If respondents from the U.S. or other countries have difficulty providing Canadian dollar figures, record the amounts in their currency and indicate the amounts to be converted.**

17a. **Ask out-of-province visitors only.** How many nights do you plan to spend in Nova Scotia on this trip? ________________nights/weeks

17b. **Ask N.S. residents only**. How many nights do you plan to spend away from home in Nova Scotia on this trip? __________nights/weeks

18. **Ask everyone but local respondents.** Within a 30 minute drive of this trail did you (or any other members of your group) spend anything or do you (or any other members of your group) expect to spend anything? Estimate how much you (or your group) spent and expect to spend in Canadian dollars in the following categories. Include all spending by you and all members of your group and include all purchases made with credit card, cheque or cash, and include taxes. **Show the respondent the list of categories and go through each one and fill in Column A. If they are unclear about what is included in a 30 minute drive of the trail, show this parameter on a prepared map.**

19. **Ask all non-Nova Scotia residents and N.S. residents who answered "Yes" to Question #2**. What else did you and do you expect to spend elsewhere in Nova Scotia (i.e. beyond a 30 minute drive of the trail) while on this trip in the same categories? **Show the respondent the list of categories again and fill in Column B.**

Estimated amount spent for:	A (Q. 18) **Local Area (within 30 min. drive)**	B (Q. 19) **Nova Scotia (beyond 30 min. drive)**
• Cost of staying in fixed roof accommodations	a.	a.
• Cost of staying at campgrounds	b.	b.
• Meals and beverages in restaurants	c.	c.
• Ferry and/or air fares to and from N.S.	d.	d.
• Auto repairs/gas/oil	e.	e.
• Other transportation fares (taxi and car rental)	f.	f.
• Groceries/liquor	g.	g.
• Other shopping purchases	h.	h.
• Recreation and entertainment	i.	i.
• Inclusive travel package	j.	j.
• Other (please specify)	k.	k.

PART C
Perceptions of Trail

Now I'd like to ask you some questions about your perceptions and observations of this trail.

20. I would like you to indicate whether the following trail components were adequate or inadequate. **Go through each factor one by one. For example, ask the respondent whether they think trail maintenance on this trail was adequate or inadequate. (Mark "No" if the respondent has no opinion.)**

		Adequate	Inadequate	No
a.	Trail maintenance	☐	☐	☐
b.	Structures such as boardwalks and stairs	☐	☐	☐
c.	Hazards marked/trail safe	☐	☐	☐
d.	Level trail surface	☐	☐	☐
e.	Directional and distance markers on the trail	☐	☐	☐
f.	Interpretive information along the trail on such things as the plants, geology and human history of the area	☐	☐	☐
g.	Washroom facilities available	☐	☐	☐
h.	Drinking water available	☐	☐	☐
i.	Garbage cans	☐	☐	☐
j.	Rest spots/picnic areas	☐	☐	☐
k.	Scenic viewing areas	☐	☐	☐
l.	Camping areas nearby	☐	☐	☐
m.	Accommodations nearby	☐	☐	☐
n.	Parking spaces	☐	☐	☐
o.	Trail information brochure	☐	☐	☐

20. Continued

		Adequate	Inadequate	No
p.	Location of trailhead well identified along the road	☐	☐	☐
q.	Other (please specify) ________________	☐	☐	☐

21. Are there any other improvements, additional services, or changes that you would like to see offered on this trail that would increase your usage of this trail?

____

Questions for Multi-Use Trails Only (Questions 22 and 23).

22. One of the issues related to the use of this trail concerns its multi-use designation whereby different kinds of users such as hikers, bikes, horses, dog walkers, cross-country skiers, ATVs, snowmobiles and other motorized vehicles share the same trail. **Adjust the list of users in this question to include only those users currently permitted on the trail or those users being considered as potential users.** What has been your experience with other types of users on this trail? **Record experience.**

____

____

____

____

23. How do you think this trail should be managed to accommodate different types of users? **Record answer.**

____

____

____

____

____

____

Now, I'd like to ask a few final questions about you that will be used to help analyse our survey results.

24. Which category best describes your highest level of education? **Have respondent point to category.**

- high school incomplete ☐ 1.
- high school complete ☐ 2.
- some tech. school/college/university ☐ 3.
- university complete ☐ 4.

25. In which category does your total household income (before taxes) fall? **Have respondent point to category.**

- retired ☐ 1.
- $10,000 to $19,999 ☐ 2.
- $20,000 to $29,999 ☐ 3.
- $30,000 to $39,999 ☐ 4.

under $10,000 ☐

- $40,000 to $49,999 ☐ 5.
- $50,000 to $59,999 ☐ 6.
- $60,000 to $69,999 ☐ 7.
- $70,000 to $79,999 ☐ 8.
- $80,000 or over ☐ 9.

26. May I ask for your name and phone number so that we can verify your participation in this survey? This information will not be used for any other purpose.

Name:____

Phone Number: (   )________________________________

Thank you for participating in this survey. We hope you enjoyed your visit to this trail.

Appendix H

Survey Comments

Question 24 Comments: Suggested Improvements for Study Trails

Blomidon Provincial Park:

- Special viewing points for birdwatching if possible.
- At the entrance to the trail it is unclear exactly where the trail begins. They ended up walking along the fence and through the bushes - off the trail - they got a little lost; Arrows on directional maps along the trail - should be replaced - many are missing, which defeats the whole purpose and makes it difficult to gauge time and distance.
- The interpretive loops are a little confusing and they went around in circles. Better directional signage might be helpful.
- Signs on the trail to show directions.
- Need additional/improved information about times and distances on the trail.
- Number the look-offs on trail and map so they correspond; signs need some work - indicate where you are; benches at look-off points would be nice; trailhead needs better signage - they followed a path along a fence but it was not marked.
- Yellow along the trail is difficult to see.
- Stop littering along the trail.
- All picnic areas are in the sun; improve signs; more maintenance.
- Look-off - cut the branches.
- Signs need "you are here" arrows; label pictures on interpretive signs.
- Clear brush from trail.
- Nova Scotia trails are great, we need more trails in the province for hiking.
- First time users of the trail, expecting "perfection".
- Brochure in Halifax tourism office please.
- Want park open earlier in the year for hiking.
- Roughness of trail - needs some work; roots should be removed; muddy areas.
- Rest spots; open up viewing area for wider panoramic views.
- More interpretive information on main trail.

Bog Trail:

- Interpretive signs are damaged.
- Boardwalk; money.
- Need directional arrows on road to indicate location of the trail (a sign coming from Ingonish).
- A picnic table would be nice.
- Money in the bog; parking lot could be larger.
- Longer trail.

Bog Trail (continued):

- Entrance and exit could be more clearly marked; a sign could be useful to tell people not to put money in the water.
- Brochure/map on individual trails - in greater detail.
- Grasses and orchids - more information please; signs do not give enough advance warning on the road.
- A distance sign at trailhead would be helpful; cleaner washroom facilities please; a garbage can on the trail would be useful.
- Money in pond; maybe a sign could be put up to discourage this.
- Information on animals could be increased.
- More advanced warning prior to entrance to the trail.
- Money in pond - need sign to prevent this.
- More detail on trail - inf. brochure.
- Respondent was very positive about the trail system in NS.
- Distance markers would be interesting.
- Tree information on interpretive signs; plant information and identification; more expansive information in interpretation; coins in bog must be removed.
- A more visible exit and entrance sign; one part of the trail slopes quite steeply and may be difficult for wheelchairs to maneuver.
- Plant information - with actual sizes indicated would help.
- Children should be warned not to walk on railing - side of boardwalk: dangerous and damaging to plants.
- More moose!
- Interpretive information on plants should be placed earlier on the trail.
- Extend trail - add branches to show more; need better signage on the road - advance warning.
- More advance warning on the road; signs are damaged on trail.
- Coins in water should be removed and prohibited.
- Money in pools should be removed. Put up a sign; trail needs arrow on roadside.
- Sign on road needs directional arrow.
- Distance marker at beginning of trail; sign on the road should give advance warnings and have an arrow.
- Coins should be removed from pools.
- Topo map - to increase information provided by park map; (Suggest something less sophisticates than $17 DNR map, but with more information then provided by current map).
- Coins in pool must be removed and prohibited (maybe a sign?).

Bog Trail (continued):

- Boardwalk - needs work.
- Coins in pools should be removed; bathrooms could be improved in park.
- Need to know how long trail is from road sign: suggest that road signs include trail lengths.
- Money in pots should be removed/prohibited; return from Meat Cove - no sign to indicate what is where (directional signs) to turns, etc.; more interpretation related to bog wildlife please.
- Better identification of trail on road.
- Parking on both sides for look-offs please; need more warning for turn-offs; it would be nice to have access to serviced camping sites within the park (currently only at Cheticamp and Ingonish).
- Entrance and exit should be sign-posted; distance marker at beginning of trail.
- Coins in pools; sign numbers should correspond to those on the map (note: I think they do, but some signs may be missing numbers).
- Park map with more detail.
- Meat Cove campground - road is terrible. Not suitable for campers, but they were not told this before they ventured along.
- More interpretive information near beginning of trail.
- Parking for oversized vehicles (campers).
- Trail is slippery when snow covered.
- Signs damaged on trail; signs no longer relate to the bog (it's fall now - no flowers left).
- Rails along trail to keep children off the bog.
- Water fountain to wash hands in toilet.

Cape Chignecto Provincial Park:

- More interpretive signs.
- Better trail map; camping sites too small and too close together; tide chart available; improved information at gate on interpretation.
- Sign at beach showing McG Brook so people know where they are if they walk along the beach; sign leading to trail might be posted near Parrsboro.
- Umbrella or shade over picnic areas; munchies truck (somewhere to get food and cold drinks) Note: there is a convenience store down the road.
- Camping area small; expand trail - put office at other end.
- Location of the washroom.
- Improved distances markers.
- Garbage cans near beach; rest spots at viewing areas; time hikes on brochure.
- You are here markers; benches at look-offs.
- Tide information.

Cape Chignecto Provincial Park (continued):

- A loop would be nice.
- Wildlife interpretation; bank machine?? none locally; brochure - include a map (like the one on the wall).
- More rest spots on difficult areas; distance markers please.
- Information on mushrooms.
- Loose gravel under foot is awkward; distance markers please.
- Human history information on region.
- Interpretation at parking lot instead of on the trail; pick up after dogs please.
- Signs about water - drinkability?; pit toilet leaching into streams in future?; map on outside of building?; distance markers please; some of the steps are wobbly.
- Sign for falling rocks on the beach; tent pads are low - need to be built up or they may flood; campsites in Refuge Cove - stream was very swollen with rain - could not access the other campsites (only #1 and 2 were accessible) Need a bridge here?; picnic tables at campsites please; increase access to scenic viewing areas - more cliff views.
- Scenic viewing areas need to be wider - provide more panoramic views.
- Rock hounding - protected area but not listed as such in the brochure; falling rocks on the beach (probably from weekend storm); at first rock - stairway is very steep and with nothing to hold on to.

Cape Split:

- Distance markers and interpretive signs at the end of the trail.
- Sign along way and with map at beginning; water.
- A sign at the beginning with general map and distance and time; directional sign at end of fenced pasture.
- Leave it the way it is; Interpretive information on the fauna and wildlife would be helpful.
- Description of wildlife and flora.
- Map at the beginning and on trail showing distances; warning signs at the edge of look-off.
- Ropes down to the beach need to be adjusted/improved; trail coming out is not well marked.
- Cutting branches along trail; signs for hiking along roadside would be helpful.
- Trees delimbed - it would be nice if dead trees were trimmed back; somewhere to sit at the end of the trail; look-off points en route should be established.
- Map would be useful.
- Distance markers would be useful.
- No bikers on trail.
- Number the trail; more signs about garbage.
- Ropes down crevices for easier access; loop trail would be nice (circular route).
- Distance markers please; map at beginning.

Cape Split (continued):

- Ban hunting in areas with trails.
- Describe trail conditions at beginning of trail (i.e. today it is very wet and muddy); washroom facilities at trailhead; mark hazards at the end of the trail.
- Less erosion - could be reduced with boardwalks across wet areas; "stay on trail" signs would be good; distance markers at beginning.
- At beginning - distance markers (kms); a brochure which provides information about the trail (including interpretive information) would be more appealing than signs along the trail.
- Half-way marker.
- Bridges over wet areas?; trail is very rough; distance markers.
- Signs to warn of hazards; distance markers; barriers on high places; a bridge to split.
- Trial surface is muddy much of the time.
- Some information spots on path are rather messy.
- Map at beginning of trail.
- Brochure about trail.
- Trail is a bit rough; trail has wet areas that are being eroded - could use a boardwalk.
- Locals may worry about parking; at end - heavy use. May develop actual trails on grassy headland to decrease trampling/erosion.
- Signs indicating no washroom. Also indicate water sources; free camping is very important.

Dartmouth Multi-Use Trail:

- Empty garbage cans; safety of parking lot; Melancholy trail - ice storm damage.
- Parking lot safety; vandalism.
- Open washroom in the winter; parking lot is not safe.
- Increased bicycle signage.
- Winter trail maintenance; like to see "no leash" law for dogs (on parts of trail) (or times of day).
- Maps of where the trails are located and where they go.
- More parking at MicMac Mall entrance.
- Clean washroom.
- Clean dog droppings on this trail.
- Increase maintenance in winter; increase security in parking lot.
- Friday and Saturday nights teenagers are loud and disruptive, and deface grounds. Should be night patrol on those nights.
- Cars are being broken into; Why is park divided and governed by HRM and the city? HRM is better maintained.

Dartmouth Multi-Use Trail (continued):

- More parking along 101 and MicMac entrance areas.
- More maintenance in winter.
- Like it more in natural state (too much like road) - roots overgrown.
- Safety on the steep trails.
- Ice/snow/dog droppings.
- Sand in the winter; brochures and maps.
- More benches.
- Picnic areas.
- Like it more in natural state - roots overgrown.
- Park is lovely, no changes needed.
- Get rid of motorized boat in the canal.

Keji Seaside Adjunct:

- Distance markers would be helpful.
- Benches would be nice in some places to sit and enjoy the view; interpretive signs at viewing areas would help (she wanted to know where the seals were).
- Too developed as it is; like more wilderness.
- One main official trail to keep people off more delicate areas; would like to see a bench at viewing points; prefer interpretive signs to brochures.
- Too civilized; too many people.
- Check-in check-out system; start making too noticeable, will increase visitors and impact on region. Keep it as is; interpretive information would be useful at look-off points and the beach.
- Sign at the beginning of trail to show distance, interpretive information; gravel needs to be smoothed out in parts - uneven.
- Don't commercialize the park any more.
- Sign on highway to show entrance.
- Beginning needs sign and arrow.
- Bikes should be allowed; distance markers on trail.
- Too many rules. No welcome in the National Park - she's objecting to the list of things you can and can't do in the park; boardwalks are not good for dogs. They can slip through and injure themselves; picnic table or benches at rest spots; need to improve map in brochure.
- Fix boardwalks - they're not strong; signage - about beach closure at trailhead; stop using ATVs on trail; Warning - no potable water; hazard warnings on rocks; need staff here to control users; need distance markers at beginning and half-way; interpretive signs at beginning and beach: animals, birds, frogs, seals, plants.

Keji Seaside Adjunct (continued):

- Directional markers would be useful at beach; trail needs to be better identified on Highway 103.
- One or more loops would be nice; suggest making trail a mix of gravel and wood chips; map is in need of upgrading; would like benches at viewing point.
- Note the trail does not have services.
- Land seems very dry – too dry for pitcher plants? Is this because of the removal of boardwalks?
- Benches along the trail.
- In D&D Guide – make note of what services are available on trail; need sign on main road (103) to indicate where trail is; distance to trail might be better signed.
- Directional signs indicating best route to the beach.
- Sign – no services on trail; sign on road directing to trail; "danger" sign on rocks; garbage can at end of trail.
- Better signage on highway 103.
- Boardwalks should have sign, "slippery when wet".
- Interpretation signs please.
- There are two entrances to this park. The other side's entrance runs over private property, and the guy who owns the land is always yelling at people. The National Parks people should work out this situation by having one entrance only.
- On one hand if you make the park more accessible to the public the park will have become overcrowded. But on the other side this park is hard to find
- This park needs signs to get to the parking lot.
- Too much like a tunnel. Needs a warning how long the walk is.
- Park should be organized better with information board in the parking lot.
- Maybe a better sign on the main highway.
- Maybe have picnic tables to rest and eat.
- Had trouble getting information ahead of time. Would have liked a brochure of this park like others give with the book doers and dreamers.
- Animal print identification chart.
- Would like to see woodchips instead of gravel on the trail.
- Try to keep things as natural as possible.

Lunenburg Back Harbour:

- Possibly extend trail.
- Washroom.
- Trail extended.
- More awareness signs and programs.

Lunenburg Back Harbour (continued):

- More water for people or dogs; make trail longer.
- Note that the trail is much improved over last year.
- Would like it to be longer; lights along trail would be good.
- Would be great if it was longer - extended in both directions; there is a good start! Maintenance in winter could be improved.
- Garbage cans along trail; security - parts of the trail do not seem "safe" in the evening.
- Clean up after dogs and cats.
- Street lights would be good.
- Need to clean up after dogs - this is an education issue; trail should be made longer.
- Access if trail is limited; no bicycles allowed please.
- Washrooms; drinking fountain.
- Increase length of trail.
- Garbage cans in the middle.
- Like to see the trail extended; more signs along the road for tourists.
- Extend the trail.
- More promotion of trail for tourists.

Middle Head Trail:

- Signs toward the end.
- More clear information.
- More washrooms.
- Map; washrooms.
- Make a loop trail; tree maintenance.
- Directional signs would be useful; clear trees at viewing points.
- Need a Middle Head sign on main road.
- Restrooms at end of trail; gravel is hard to walk on - prefers "natural" trail; distance markers would be helpful.
- Distance markers would be helpful; directional markers at end where path forks; is the half-way marker really half-way?
- Fountains like they have on golf courses would be good; would like to see more day-use trails constructed; some tree roots are difficult to walk over; distance markers would be good - the half-way one does not seem half-way?
- Map of highlands not detailed enough.
- Directional signage near the end.
- Need directions where the trail forks; would like information provided on specific trails; interpretive information on birds and flowers would be good.

Middle Head Trail (continued):

- Garbage cans near benches; identify trail on main road - only signs to Keltic? Washroom facilities near parking lot would be good.
- Directional markers might be useful at the end.
- Directional markers at half-way point not really half-way? Trail information could be more descriptive.
- Water would be nice; found litter on the trail.
- The half-way sign is not half way along the trail; the brochure/park map does not accurately show where entrance to trail is located; a picnic area at the beginning of the trail would be good.
- Broad Cove is too strenuous, compared to the description on the map. She believes better, more detailed information should be provided; steps are too wide - makes walking difficult (too small to take two steps; too long for only one).
- Brochure map should accurately reflect trail location.
- Trail descriptions on the map could be longer and more detailed.
- Historical interpretation on trails; separate. Guides for each trail (even recyclable).
- More scientific information: flowers, birds, history, fish; history of settlement in Ingonish; markers on trail to describe trail difficulty (for senior's information).
- More rocks on the surface for walking.
- Trail surface is slippery in some places; could be dangerous for seniors.
- Map should better reflect location of trailhead.
- Interpretation - geology and botany please; distance and height of surrounding land forms would be informative.
- End of trail needs directional signs; need rating of trails - easy, medium, difficult; information at bottom of trail; railing at end of trail; need an indication of how steep this trail is - an early warning if possible.
- Trail grading as to difficulty; steepness indicated at beginning or on map.
- Trail has off-shoots which should be noted as not being maintained to people don't get lost.
- Ecology interpretation signs; indicate no services.
- Ecological interpretation signs.
- Ecological interpretation (birds).
- Please remove all the dead wood and dead trees from the trail - this will improve the views.
- Marker at top to tell direction of return.
- Should have difficulty rating or indicate steepness.
- Mark cliffs - hazard at the end of the trail.
- Need distance indicated on road signs.

Middle Head Trail (continued):

- Whale interpretation sign - depressing. Please remove! More interpretation about flora and fauna.
- Park office closed in evenings and on Sundays!?! Directional markers at end; sign at beginning of trail: no water available, bring your own; scenic views were very good; garbage can and washrooms at end of trail.
- Develop loop at end or at least put up directional signs.

Tiverton Balancing Rock Trail:

- Rarities marked; more interpretive information; image not appended to Internet; 4 toed salamanders.
- Trail map; Safety - netting not good; not safe for little kids.
- Laminate newspaper photo; show photo of balancing rock; not in Doers and Dreamers.
- Thick rope better than thin rope.
- Need bigger sign - missed it.
- Need things to draw people here; sign overgrown.
- Make it less slippery.
- Remind people to bring garbage out; put tables at top of rock.
- At ferry - sign saying # of kilometers.
- Brochures supplied at the beginning of the trail.
- Cut out roots; more benches on way up/down; more shingles at very end; birds/animals of the area.
- Washroom facilities really smell bad.
- Rails on both sides of steps.
- Signage grammar.
- Trail erosion management.
- Mark trail better as far as distance is concerned because of ferry time.
- Fountain.
- Maybe have metal stairs instead of wood ones.
- More stairs, grip tape or shingles.
- More ropes - on either end.
- Sitting areas.
- Stumps should be taken out of ground and support ropes should be made from nylon.
- Great internet sites on NS.
- Need buses to this area.
- Keep this area as natural as possible.
- A bit slippery in parts.

Tiverton Balancing Rock Trail (continued):

- Guide rope should be thicker.
- To make the trail safer in parts get rid of roots and stumps and some of the steep muddy parts.

Question 26 Comments: Other Improvements Recommended for Other Nova Scotia Trails

- Liscomb Lodge - dangerous (Mayflower trail).
- Coastal Trail - mainstay. Need boardwalks (in CBH National Park).
- Fishing Cove - washrooms.
- Dartmouth - need more rest spots.
- Overlook - sign damage; Guysborough Trail - wheel ruts, not enjoyable on a trail.
- Victoria Park; Sandy Cove - great.
- Ocean views on the beach.
- Expand Cape Split trail system to have more than one route.
- Cape Split - trail needs work at beginning, it's too rough.
- Lake of Islands Trail in Cape Breton - desolate, needs signs, interpret.; more emphasis for repeat customers - reward system.
- Parrsboro Trail - needs signs along road.
- Rollerblade park would be nice.
- Trail marking - grading system to indicate level of difficulty.
- Cape Breton Highlands - trails not well done; Skyline - trail was closed part way through. Disappointing.
- Length - no sign indicating length; brochure marking looked different.
- More information - animals; more interpretation; no data available on pitcher plants.
- Washrooms and water available.
- More information on rails trails.
- Advertise in Yankee magazine.
- Damage from bikes on Cape Split, especially in marsh areas.
- Keji Adjunct - more wilderness, less maintenance.
- Warning about hike.
- Driving map with side roads.
- Franey Trail - too long, information not good; need up to date information on trail within province.
- Swimming holes.

Question 26 Comments: Other Improvements Recommended for Other Nova Scotia Trails (continued)

- Coastal Trail - not as many ocean views as they had expected. Maybe it's misnamed?
- Longer trails (5-10 km).
- Would like to see longer hiking trails established.
- Too many people.
- Broad Cove, Usige Falls - better signage needed for these trails.
- Use of ground no good - should be more "wilderness" style.
- Meat Cove - more markings along routes.
- Swimming places.
- Cape Smokey - no distance signs on the trail; it was difficult to find.
- Better signage along trails; Cape Split needs directional signs.
- Water fountains and access to drinking water; Trails of concern: Shubenacadie, Walton.
- Big stones on Skyline Trail - can trip on them.
- Carney Brook - small bridges out over creeks; Mabou - bridge missing.
- Cape Split/Brier Island - more information about trails and their locations would be helpful.
- Any trail worth constructing should have interpretive signage.
- Hurtle's Beach trails not very well marked.
- All trails should have interpretive information.
- Skyline needs maintenance and interpretation; people berry-picking, need signs to remind people not to take things from the park.
- Include park information in NS Tourism information package.
- Glasgow Lake Lookoff: #14 - a very difficult trail unless you have the right footwear. Some of the boardwalks are not very steady.
- Shorter trails for people with kids would be nice.
- Crystal Crescent - sign asking for no ATVs. Tearing up trails. Hikers should stick to trails; Gully Lake Trail - no ATVs please.
- More trails please.
- Would like to see more trails that "loop" rather than linear.
- North River (in Tarbot) - needs work. Very rugged but beautiful.
- Drinking water available on some trails would be nice.
- Chemin de Buttereau and Le Buttereau trails are confusing on map; on trail - need sign with distance and direction.
- Booklet to guide you along trail would be helpful for interpretive information.

Question 26 Comments: Other Improvements Recommended for Other Nova Scotia Trails (continued)

- Don't want to see trails become too "developed". Like the rugged, "wild", natural trails.
- Some don't have washrooms and garbage cans.
- Sand for steep parts.
- Sand for winter trails.
- First time in NS.
- Waverley Sports Park - isolated.
- Never been here.
- Haven't decided if we're ever going to return to this area.
- Willing to try new trails that are for overnight purposes.
- "Nice garden in the parking lot"; maybe a couple of picnic tables.
- Long trails a barrier/time.
- First time here.
- Salmon River - too uneven with too many roots; need directions for trail (got lost).
- Near Parrsboro - a waterfall is advertised but apparently collapsed a few years ago.
- Washrooms please at: Wedgepoint, Cape Split.
- Needs more road signs.
- Road - signs - more trail details - direction, length.
- Entrance and exit should be sign-posted; distance marker at beginning of trail.
- Some trails seem wet; wider trails?
- Skyline - rough trail. Footing difficult.
- Cape Smokey - on top a trail sign with no information; Usige Ban Falls - trail not marked. Need sign.
- Keji Adjunct - need sign on 103; Cape Chignecto - maybe some rest spots? More warning about steep hills; Crystal Crescent and Duncan's Cove - any washroom facilities?
- Mabou - Lake Ainslie trail in Provincial Park? Couldn't find it; Mabou mines trail - could not find this either (both are marked on Nova Scotia Map).
- Maybe create a trail that has a loop to make a complete trail with constant new scenery.
- Too steep, more steps-grip tape.
- This trail is fine the way it is.
- Beaver interpretation.
- Longer trails please (for overnight use).
- Cape Split - needs rest areas; improved side views; needs barriers on cliffs.

Question 26 Comments: Other Improvements Recommended for Other Nova Scotia Trails (continued)

- Open provincial trails in winter; new trails need more development - maintenance; high winds knock trees down and they should be cleared after storms.
- Stop clearcutting and ruining natural places.
- More information of where trails are to be found.
- Crystal Crescent - please remove nude people. So they can hike during summertime; Martinique and Lawrencetown Beach - people damage cars and steal. Need patrols? Staff? Not good for tourism.
- Taylor Head - very rough. Needs improvements; Liscomb Lodge trail - very rough (Salmon River Trail); Shubie - suggest lights so trails can be used in the evening throughout the year.
- Need more signs for Chignecto Park; interpretation - information at park entrance.
- 2 Rivers Park - boggy.
- Interpretive information at beginning of trail would be useful (i.e. on this trail you will see...).
- TransCanada trail should be completed; develop a trail through province; make it possible to bike whole thing instead of biking on the highway.
- Bike trails in Keji? Could not find any information; Shubie and Pt. Pleasant - good as urban trails but don't develop park and rural trails that much; increase interpretive information along trails - e.g. identify trees, flora; increase trail information available in Doers and Dreamers Guide.
- On road signs - description of trails and facilities/activities available.
- Fishing Cove - missing firewood? No longer allowed to have fires? Feel there should be fires allowed here for campers.
- People should respect trails and trail use.
- Distance markers on trails please.
- Benjie's lake - signage should be improved.
- Winter camping more widely available please; free wilderness camping please.
- Local communities should have more information on trails.

Question 27 Comments: Experience With Other Types of Trail Users

- ATVs wreck the trails; no real experience but does not like ATVs.
- Jet ski in the water while they were on the trail. This took away from the solitude experience.
- Positive.
- Avoided one trail because she saw a cyclist.
- Bicycles.
- No experience except in Guysborough where trail has been used by ATV/trucks.
- Bikers give notice when passing.
- Great place for kids to ride bikes.
- No experience with other users.
- Notice for bicyclists.
- No problem.
- As long as careful.
- Negative experience, no warning from cyclists.
- No big deal.
- Problems with biker.
- No experience; use ATVs on designated ATV trails.
- Cape Split; no big deal for these people.
- Jet-skis, snowmobiles, bicycles.
- He is an ATV user and believes he is careful but knows that others are not so conscientious around other users.
- Risser's beach - bicycles on boardwalks is a pain.
- Mountain bikes OK but motorized vehicles - no.
- Mountain bikes on trails.
- Trail in Prospect has motorized vehicles on it.
- One mountain biker. No problem because they were polite.
- In Keji N.P. - another trail for bikers/hikers.
- Keji - some trails walk/bike - annoying to walkers but liked to bike it. It's difficult to segregate this.
- Terrible to have motorized vehicles on trails - cause erosion and tears up trails.
- As long as dogs tied; dog droppings must be picked up.
- Dog - O.K.
- No, didn't meet anyone.
- No - lots of broken glass; steps are good.

Question 27 Comments: Experience With Other Types of Trail Users (continued)

- No - he slows down when he sees walkers.
- Nothing bad - saw horse, ATV; snowmobiles dangerous because fast.
- Ring bell before passing someone.
- Shubie trail - check multi-use.
- Positive (no explanation).
- Great place to ride bike. Positive experience.
- Dog walkers.
- Shubie - Multi use (bikers and dogs); smokers on trails?; don't like bikes, too quiet.
- One dog.
- ATV - feud between snowmobiles and ATVs - trail sabotage. These vehicles destroy trails.
- Avoid trails with mountain bikes or ATVs.
- Don't like motorized vehicles.
- No problems with bicycles; don't like motorized vehicles.
- Multi-use - no problems with bicycles.
- Bicycles on trails - no problem.
- Issues - right of way.
- Have encountered on trails.
- No problem on this trail.
- Problems with bikes - trying to scare people.
- Children on bikes go very fast.
- Bicycles are a nuisance. This trail is used by a lot of older people.
- Dogs not on leashes; bicycles need bells.
- Bikers on non-biker part.
- Trails should be wider.
- Have bicycles ring bells.
- Dog shouldn't have to wear a leash.
- Horses tear up trails.
- ATVs tear up trails.
- Almost run over by bikes, should ring bells; cross-country skiers have own lane in winter; Dogs off leash causing problems, jumping on others, attacking wildlife.
- No motorized vehicles; bicycles with bells; dogs on leashes, bring doggy bags.
- Walking all over the trail.

Question 27 Comments: Experience With Other Types of Trail Users (continued)

- Cyclists have to give warning (bell) and slow down.
- Bikes give warning (bell).
- Dogs off leash.
- Keji - Kids biking down trail not wide enough.
- Everything's fine.
- Problem with biker; Dogs on leashes.
- Some dogs on leashes.
- Doesn't agree with multi-use trails, maybe a designated area - share.
- Bikers; Dogs on leash.
- Some runners and cyclist - fine.
- Separate trails for safety issues.
- Kids on bikes.
- Bikers are an issue; Speed too fast.
- No motorized vehicles, alcohol.
- Separate trails for ATVs.
- More designated trails for offroad transportation.
- Bikers sometimes go too fast on the small trails.
- Walking trails only, no ATVs please re: small children - takes away from atmosphere.
- Rate the trails by experience of hikers and difficulty.
- Separate trails for certain users. Doesn't want to have to worry about that sort of thing (ATV).
- Separate trails for motor vehicles.
- Separate trails.
- Keep motorized users on separate trails, they're too dangerous.
- It's dangerous (encountered a motorcycle once - mountain bikes).
- Doesn't like multi-use trails.
- Walkers should have right of way.
- Safety first.
- Separate trails - sometimes feeling bad almost running people over.
- Don't really like dogs too much, and haven't really encountered ATVs or horses.
- Keep ATVs out of the Provincial Parks and off of hiker's trails. They're far too dangerous.
- Keep dogs on leashes.

Question 27 Comments: Experience With Other Types of Trail Users (continued)

- A problem with snowmobiles in the winter time once a long time ago. They should have their own trails.
- "Bikers are a pain". They don't like to have to move to accommodate them.
- Motorized vehicles are dangerous.
- Snowmobiles will come behind you when you're cross-country skiing.
- I like the idea of being able to bike on the same trail with hikers.
- Trails are too narrow for mountain bikes.
- Don't really have a problem with those guys.
- Not in favor of multi-use trails.
- No problem with multi-use trails except for motorized users.
- Hasn't had any experience with this.
- Keep dogs on leashes; don't want to see ATVs.
- We are multi-users.
- ATV on train track.
- Nearly run over by ATVs who then splashed through a puddle and soaked the hikers.
- Multi-use trails are good in the sense that they are always being used. But this also tends to ruin the trails.
- Don't ruin nature.
- Against multi-use trails tears up trails.
- Opposed to multi-use trails.
- Everyone else is fine, but we are not for motorized trails.
- No ATVs please as these are too dangerous.
- ATV users are unappealing and too noisy for hiking trails.
- No ATVs.
- No multi-use - too much noise would cause a change in the wildlife area.
- No experience, doesn't know about this issue.
- No problem with all sorts of users, but motorized users should use other trails.
- No motorized users only.
- Against ATV - Motorized users; horseback makes the trail messy; dogs are unsafe.
- Motorized users ruin trail.
- Not in agreement.
- Motorized users shouldn't be on the same trails with hikers.

Question 27 Comments: Experience With Other Types of Trail Users (continued)

- No motorized users. Should use their own trails.
- Owns a snowmobile but uses it on own land.
- Don't like ATVs.
- Dartmouth Multi-Use Trail - like silence of wilderness.
- Met bicycles on this trail.
- Not in Nova Scotia.
- Snowmobiles and ATVs are bad but all other multi-users are OK.
- ATVs - Snowmobilers disturb wildlife.
- No multi-use trails for motorized vehicles.
- No ATVs or motorized vehicles, it destroys the environment. Other multi-users are OK.
- Don't really hike that much.
- No experience with that.
- Not Multi-Users.
- Only really using trail on vacation trips to see countryside; not really big on motorized users.
- No ATVs.
- No ATVs please but others are OK.
- No motorized users.
- ATVs are too noisy to be used in or around parks for nature purposes.
- Motorized people are OK if the trail is marked well and divided properly.
- ATVs and snowmobilers are annoying.
- No experience as we don't use multi-use trails.
- Against motorized users.
- Being in a populated area, letting motorized users on this trail would be a bad idea. All the other multi-users are OK.
- Leave this trail alone; wouldn't want motorized people on this trail.
- Bikes should have bells.
- Leave this trail the way it is.
- Passed a huge truck with skidder on the back.
- Mountain bikes - issue because of erosion.
- ATVs and bikes create ruts.
- No bad experience; cyclists muck up trails though.
- Cross-country skiers in winter; ATVs on trails.

Question 27 Comments: Experience With Other Types of Trail Users (continued)

- One cyclist.
- Mountain bikes on this trail; not the best but not easy to avoid.
- Bikes and ATV on trail today; ATV was going slowly. No problem.
- Cyclist and ATV today on trail; No problem.
- Speeding bikes in Shubie park.
- ATVs in Cape Split; Musquodoboit - too much vehicle traffic on trails.
- Have encountered bikes on the trail before. They can sneak up on you, which can be dangerous when you have little children.
- 2 cyclists on this trail - they were polite.
- No problems with cyclists but there may be in the summer.
- Cape Split - a disaster because of bikes; Keji - dangerous with bicycles.
- Bicycles should ring bells before passing.
- Bikes go too fast; No ATVs!
- Keep this trail for hikers and bikers; hit by ATV once.
- No motorized users; maybe widen the trail for bikers.
- Dogs on leash; ATVs are not good for hiking trails.
- Bikes on Cobequid trail; courtesy of user is very important.
- Cyclists give warning, maybe shouldn't be there.
- Good idea to have trail open to all users.
- More respect from ATVs, ruin terrain, going around obstructions ruining ground.
- Bikers going too fast.
- Keji - good that it's not open to cyclists.
- Do not like bikers on the trail.
- Hiking trails should be open to hikers/walkers only.
- Prefer just walkers and hikers.
- Dogs on leash at all times.
- No problems.
- Disruption of peacefulness, having it open to all users.
- Cleaning up after dogs, bags on trail.
- Dogs should be on leash at all times.

Question 28 Comments: Managing Trails to Accommodate All Types of Users

- Trails should be segregated to accommodate all users.
- Think trails should be separate and designated for ATV or bicycle.
- Common-sense prevails.
- Different trails to suit different needs.
- Own trails - should have trails separately designated for ATV use.
- All but ATVs together on one trail would be fine. Keep motorized vehicles separate.
- Don't want trails to be for all users. Separation of trail use.
- More signs.
- Common sense is the key.
- Segregate trails for use.
- Better signage; segregate users.
- Think ATV trails are good - separate from other users.
- Separate users = separate trails; different trails for snowmobiles vs. x-country skiing.
- Make trails wider.
- Wider trails might be helpful.
- Separate trials for motorized vehicles.
- Make trails available so you can; wider trails.
- Not a big supporter of multi-use trails; segregation of users would be a good idea.
- Certain trails for motorized vehicles only.
- Separate trails for motorized vehicles.
- Designated trails for separate users.
- Separate paths for bikes.
- Separate trails for motorized vehicles.
- Trails should be widened.
- ATVs - don't want them disturbing the peace; bird life and amenities; recommend a 50-km buffer around hiking trails to keep ATV noise out.
- Motorized vs. non-motorized vehicles.
- Nothing gas-powered around others; need to keep it "back to nature".
- Separate users; keep ATVs off all trails.
- Keji - should be single use only (hiking).
- No ATVs in Keji - bikes separate; want only hiking in Keji Adjunct.
- Nothing motorized or 2-wheeled; keep hiking trails for hikers only.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Separate trails for all users.
- Separate trails for motorized vehicles.
- No motorized vehicles.
- No wheels - erosion; mountain bikes - designated use only.
- Separate walking trails.
- Keep motorized vehicles off because they - ruin trail - noise; unsure about bicycles; walking on trail - least impact.
- More surveillance of trail users to make sure they respect others.
- People need to be aware of other users and respect them.
- Hikers and bikers are hard on some trails. Don't work.
- Not graveled? Minimum surfacing required to keep people on the trail.
- Scares animals; off-trail - motorized vehicles tend to go off trails and destroy wilderness.
- Motorized vehicles - separate trails; mountain bikes - as long as they respect others, OK, but they're quiet and can sneak up on people.
- No; protect wilderness number one priority.
- Wide mountain bike trails; side trails covered up or they'll wreck them; wheelchairs - no view on this trail.
- Trail specific - what trail can't/can accommodate.
- Have motorized and non-motorized vehicle trails; wide bridle path; depends on surface; deal with specific trail basis; let as many people use it as possible.
- ATVs own trails - dangerous with kids.
- Nicely designed.
- No mountain bikes on Cape Split.
- No problem here; could have max. Speed signs - can see people from far away so it's only a problem where the trail goes up and down hills and there isn't good visibility.
- Education; signage.
- Signage about right of way.
- Bicycles should be allowed everywhere as long as they moderate their speed.
- Bikers and dogs deterrent.
- Segregated/restricted use.
- Integrate users well to avoid accidents.
- Noisy stuff should be segregated.
- Opposed to motorized vehicles.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Multi-use if wide enough; some set aside for mountain bikes and multi-use; no motorized vehicles.
- Keep separate users separate.
- Segregated; trails for bikes only.
- Not crazy about mountain bikes.
- Motorized vehicles should have own trails somewhere else; jet skis are also irritants and should be restricted.
- One trail for each activity.
- Establish trails for hikers only.
- Motorized vehicles apart from others.
- Wider trails with demarcation for other users; keep ATVs off hiking trails.
- Keep users separate.
- Separate trails.
- Separate hikers so wildlife can be seen; other users create noise which can scare animals.
- Have no problem sharing trails if they are wide enough.
- Keep motors off trials; some trails for mountain bikes.
- Separate users; ATV and mountain bikes might go together?
- Hiking trails only should be developed.
- Motorized vehicles - dig up trails - dangerous; separate trails for hikers.
- Bikers and hikers OK; ATVs - not on same trail they cause dust and noise.
- Keep ATVs off - on road only; horses separate too - ruin trails; mountain bikes separate - ruin trails.
- Hiking separate from other users.
- No motor vehicles on trails.
- Limit trails to non-motorized vehicle use.
- Should be more trails for bikes; shoulder on highway; can have trails for bikes and walkers together as long as cyclists know to be respectful of other users.
- No ATV or horses on hiking trails; no mountain bikes on hiking trails.
- Keep trails separate and designate specific users as has been done CBCT.
- Avoid motorized vehicle trails.
- No idea. But bikes should have bells.
- Unique trails for different users.
- ATVs tear up trail; mountain bikes not so bad.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Prefer not to see ATVs on hiking trails.
- ATVs do not belong on walking trails; challenge to manage.
- Some roads are not suitable for bicycles but should be improved.
- Bikers and walkers apart.
- Certain trails - do not allow motorized vehicles; trails are meant for walking.
- Should keep trails for walkers only; no bicycles - they go too fast and crowd the trail.
- No problem with motorized vehicles on trails.
- Cyclists need whistles as warning.
- Think province is doing a good job; could increases local usage of this trail; don't want to see motorized vehicles on trails.
- Just like walking trails.
- Bicycles OK; horses OK; ATVs too fast for walking trails.
- Walkers only.
- Bikers need horns.
- A sign for bikers to respect walkers; education and courtesy.
- Don't have ATVs and walkers together.
- Walking trails only. No other users - separate trails for them.
- Keep ATVs off this trail.
- Separate trails for separate users; seasonal use.
- Not motorized.
- Keep ATVs off hiking trails.
- Trails for walkers/hikers only; separate trails for different users.
- Dog patroller to check dogs for leashes.
- More signs.
- More signage.
- Designated trails for separate users (i.e. horses).
- Keep trails users separate - off walking trails; horses tear up walking trails.
- Trail terrain should indicate type of use.
- No motorized vehicles; think people should walk.
- Separate trails for separate users.
- People come for beauty and quiet. Need to have walking trails without other users.
- Separate trails.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Want to keep motorized vehicles off trails; bicycles should be restricted as well.
- No ATVs on walking trails - noisy.
- Keep just walking trails - separate users.
- Single use or "motorized vs. non-motorized user".
- Separate or parallel trails for different users.
- Should designate - ATV only trails; have some bike only trails.
- Bike trails are good; ATVs and walkers - not good.
- No ATVs on trails; multi-use trails must be wide to be safe; training for cyclists to be conscientious.
- No ATVs on walking trails.
- Prefer separate trails for separate users.
- Separate trails.
- Motorized vehicles - very noisy.
- Multi-use on some trails only would be good; wilderness trails: hiking and x-country in winter; limited users please!
- Separate trails - Bikers OK but motorized can cause problems; difficult situation to address.
- Walking trails for walkers only.
- Multi-use - like them if they are available; but hikers may not like bikers on the same trail; motorized vehicles very dangerous and fumes for walkers; suggest restricting ATVs to abandoned rail lines.
- Trails for pedestrians only please.
- Independent walking trails - walk +/ski without machinery; bikers on some trails with etiquette and rules.
- Walking trails only please.
- Motorized vs. non-motorized trails please.
- Bikers and walkers don't mix.
- A patrol/cleaner to maintain park during the day, fines for dogs off leash.
- Wheelchair accessibility improved.
- Dogs on leashes; some sort of trail patrol.
- Signs saying please keep to the right.
- A lot of dead wood along trailside; should be removed, is a fire hazard.
- Fastest object must give right of way; wider trails.
- No motorized vehicles should be on the trails.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Dogs restricted to leash on at parks; if provide dog run - area set aside; people walk in ski trails - signage.
- Designated mountain bike trails - might bike more; dogs should be under control - don't need to be on leash; Cape Split - ATVs dig up ground.
- Very difficult to answer; don't widen trails.
- Bikers.
- Designated area.
- Yes.
- Fine.
- Separate trails.
- No ATVs here; own trails for horses.
- Separate trails and not Provincial.
- Yes.
- Separate trails.
- Specified larger trails for bikes so they don't run over the hikers and walkers.
- Separate trails only.
- Separate trails for certain users.
- More trails for certain users.
- Separate trails.
- Separate trails for different sorts of users.
- Separated trails.
- Separate trails.
- Separate trails for ATVs.
- Separate trails for mobilized people.
- Separate trails for motorized people.
- Separate trails for certain users. ATVs and snowmobiles. Hikers and bikers.
- Maybe have separate trails or designated times through the year when they can use them.
- Separate trails for motorized trail users.
- Separated trails.
- Not really sure.
- Separate trails for motorized users opposed to hikers/walkers.
- Separate trails for certain users.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Motorized users shouldn't be on the same trails with unmotorized users.
- Wider trails.
- Separate trails.
- ATVs and snowmobiles have their own trails.
- Keep trails for hikers only.
- Wider trails.
- Separate trails for walkers.
- Motorized vs. non-motorized trails please; motorized vehicles rip everything up.
- Walk and ski together; keep motorized vehicles separate.
- Don't like engines or wheels on walking trails; noise from ATVs not appreciated.
- ATVs separate please; x-country ski, hiking and biking together is okay.
- ATVs should not exist; people come to get away from that kind of thing; bikes not so great either.
- Don't like to share with ATVs.
- Bicycles and walkers together but definitely not ATVs; parallel trails would be good.
- Keep ATVs off hiking trails.
- Separate trails for different users.
- Multi-use trails - must be made clear to all users that there are other users as well.
- ATVs too noisy; bikes on side trails okay.
- Having a set of designated trials for motorized users that would run in one direction.
- Separate trails.
- They should have their own trails.
- Let the ATVs and snowmobiles do that on their own property.
- Separate trails for certain users.
- Don't bother with helping them, just keep them off the trails.
- Maybe use their own property.
- Get rid of motorized users.
- Separate trails.
- Separated trails because they need other places to go to as well.
- Use their own land.
- Use own land.
- Have their own trails.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Get their own separate trails.
- Use their own trails.
- Separated trails.
- Motorized users should use their vehicles on their own land.
- Separate parts for them.
- Some designated trails but can be used by other users as well.
- Off road vehicles - dangerous on walking trails.
- Keep ATVs separate - noisy and have fumes.
- Walking trails only please.
- ATVs off trails in National Parks please; they destroy the habitat.
- Separate users on separate trails.
- Keep ATVs and bikes off hiking trails; tear up trails and noisy .
- Walkers only trails.
- Parallel loops for bikes vs. hikers when trails not wide enough for both.
- Please allow ATVs on really long trails.
- Walking trails only for walking - no other uses allowed.
- Separate mountain bike trails; Motorized vehicles tear up walking trails.
- Build ATV trails but keep them far away from people.
- Separate trails; ATVs - a lot of damage vs. quiet; People who make damage should be responsible for maintenance.
- Trails are for walking (should be).
- No horses on hiking trails.
- Walking trails only please.
- Time of day scheduling to reduce mix of users on same trails.
- Keep ATVs off trails; separate trails please.
- Separate trails or designated directions for different ways.
- No off-road vehicles on trails.
- Hikers and mountain cyclists barely co-exist; Bikes on 1 day/week on a trail; no racers (bikes) allowed on walking trails; horse riders - intimidating and no good on walking trails.
- Trails should be for hiking/biking/skiing ; non-motorized trails only please.
- Walking trails only please.
- Walking trails only.
- Motorized vs. non-motorized trails.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Separate trails for separate users.
- Better signs/labelling to indicate which trails are multi-use.
- Keep ATVs and Snowmobiles off trails.
- Be aware of other users if you use a shared/multi-use trail.
- Separated trails for motorized users or they should use their own land.
- Don't let them on hiking trails.
- Separated trails.
- Separated trails.
- Separated trails.
- Maybe they should use their own trails.
- Use their own trails or build more.
- Separated trails.
- They should have their own trails.
- Use their own land or designated trails.
- Use own trail, use own land, or create new trails.
- Some trail use is OK if managed well.
- Clubs develop trails.
- Don't let motorized users in the trails for hikers because someone will get hurt and you'll never get rid of them.
- Separated trails that are designated by private owners, clubs or by Parks Canada.
- They should use their own trails.
- No motorized users please.
- Certain users (ATVs - Snowmobilers) should use their trails.
- Hiking trails only.
- No motorized vehicles on hiking trails.
- Ban ATVs from Provincial trails.
- No idea; No problem with Multi-Use as long as trails are wide enough and people respect other users.
- Small multi-use portion would be good; Then further in, make hiking only.
- Wide trails are good for multi-use; on narrower trails, parallel for different users.
- Wide trails for multi-use; Multi-use is fine for all users (as long as different users are polite, there is no problem with shared trails).
- Wide - cyclists; narrow - hiking only.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Separate trails for different users.
- Separate trails - so wheelchairs can use trails; hikers may want a more complex trail.
- Motorized vehicles - separate trails.
- ATVs on own trails please.
- Necessary evil? Separate trails would be great but expensive.
- Use common sense.
- Leave trails natural - do not overdevelop.
- Wider trails.
- If trails are busy, separate users.
- Prefer hiking trails.
- Hourly designations for different users; bells on bikes.
- Cyclists - very surprising on trails when they come up behind you; Mountain bikes and people don't mix; horses tear up trails.
- Trails wide and separated; More should be done for cyclists.
- Low impact; common practices - respect other people when they're there (i.e. cyclists vs. hikers); "track".
- Maybe bikers need own trails; definitely don't want motorized vehicles on hiking trails.
- Don't like ATVs; non-motorized trails only please.
- Pedestrian trails separate please; bikes and ATVs intrusive.
- Walking trails only. No bikes, separate trails; trails with bikes and people become problematic; ATVs off beach please.
- Bikes scary on trails; ATVs nuisance - need own areas.
- Keep motorized vehicles off.
- Keep users separate; designate either walking /biking trails or else wider trails.
- Mountain bikes - high erosion factor; separate trails for bikes.
- Wide trails for bikes and hikers; ATVs on own trails.
- Don't agree with motorized vehicles on trails; Agree with multi-use though; mountain bikes abuse trails - wet areas - erosion - makes trails wider.
- Keep foot traffic only on trails; can make separate trails for other users, but bikes tear up trails for hikers.
- Well documented at start of trail the types of uses available on trail; specific trails for motorized vehicles.
- Separate trails for motorized vehicles and maybe bikes.

Walk or bike on trails; separate trails for motorized vehicles.

Question 28 Comments: Managing Trails to Accommodate All Types of Users (continued)

- Keep ATVs off - noisy, smelly, disrupt wildlife, bikes OK.
- Separate users on separate trails.
- Separate uses.
- Bikes cause erosion.
- They seem fine but the vandalism on this trail is unfortunate.
- Longer trails would be good for bikes. Make trails wide enough and that should be fine.
- Keep hiking trails separate from other users.
- Different paths for different users to decrease congestion.
- Don't like bikes on trail.
- Keep ATVs off.
- Some trails exclusively for walking; but shared use too.
- Keep trails for walkers.
- Don't think we have population to be concerned about too many users on trail.
- One lane for walkers; one lane for bikers.
- Widen the trails.
- ATVs should use their own trails.
- Widen trails or create bigger trails.
- No ATVs on trails.
- Own power vs. motorized vehicles on trail.
- Divide trails; designated uses.
- Difference between motorized and non-motorized.
- Bikes fine; ATVs off trails please.
- Signs saying there are cyclists on trail.
- Blocks preventing motorized vehicles from entering; stay on trail.
- Separate trails for different types of users.